Report of Michael L. Hartzmark, Ph.D.

IN RE COMMVAULT SYSTEMS, INC. SECURITIES LITIGATION

United States District Court

District of New Jersey

Master File No. 14-5628 (PGS)(LHG)

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I. SCOPE OF ENGAGEMENT

- 1. I have been asked by Lead Counsel ("Counsel")¹ for the putative Class (the "Class") in the matter of *In re CommVault Systems, Inc. Securities Litigation* to determine whether CommVault Systems, Inc. ("CommVault" or the "Company") common stock traded in an open, well-developed and efficient market² between May 7, 2013 and April 24, 2014 inclusive (the "Class Period").³ This report sets forth my findings and opinions on this subject and related topics in connection with the Class's claims under Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and U.S. Securities and Exchange Commission ("SEC") Rule 10b-5 adopted thereunder (collectively, "Section 10(b)").
- 2. I have reviewed the Complaint and assume the allegations are true for purposes of this report. I have made no independent investigation of the issues of liability and loss causation in this case. My report applies economic, financial and statistical analyses to determine whether CommVault common stock traded in an open, well-developed and efficient market.
- 3. My report is organized as follows: In Section II, I present my qualifications as an expert. In Section III, I summarize my opinions. In Section IV, I describe the concept of market efficiency. In Section V, I demonstrate that CommVault common stock traded in an open, well-developed and efficient market by examining the "operational" *Cammer* factors⁴ and other operational factors that courts have considered.⁵ In Section VI, I demonstrate that CommVault common stock traded in an open, well-

Bernstein Litowitz Berger & Grossmann LLP.

[&]quot;The fraud on the market theory is based on the hypothesis that, in an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business. Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements." *Basic Inc. v. Levinson*, 485 U.S. 224, 241-2 (1988).

Second Amended Class Action Complaint and Demand for Jury Trial dated February 5, 2016 (the "Complaint"), p. 1.

⁴ *Cammer v. Bloom*, 711 F. Supp. 1264 (D.N.J. 1989).

⁵ Krogman v. Sterritt, 202 F.R.D. 467 (N.D. Tex. 2001).

developed and efficient market by examining the "price-related" *Cammer* factors⁶ and other price-related factors that courts have considered. In Section VII, I show for CommVault common stock that the calculation of damages can be done on a class-wide basis subject to a common methodology. In Section VIII, I present my conclusions.

II. QUALIFICATIONS

- 4. I am President of Hartzmark Economics Litigation Practice, LLC and prior to this I was a Principal and Director at Navigant Economics (formerly d/b/a Chicago Partners, LLC, a subsidiary of Navigant Consulting, Inc.). Both firms specialize in the application of economics and finance to legal, commercial and regulatory issues, including issues such as those addressed in this report. I have also been engaged as an independent contractor by the Office of the Attorney General of the State of New York and other State Attorneys General on a confidential basis to assist in investigations of the mortgage-backed-securities market.⁷
- 5. I have served as a testifying and consulting expert in numerous securities class actions. In addition, I have published scholarly articles on a multitude of issues in financial economics including those associated with securities class actions. I have spent much of my time as an economic consultant evaluating issues related to the certification of securities class actions. My primary focus has been on securities such as corporate bonds, common stock, Treasury and energy futures, swaps, swaptions and options, and asset-backed securities. I wrote a series of reports cited in the district court's opinion granting class certification of DVI common stock and notes in *In re DVI, Inc. Securities Litigation*, 249 F.R.D. 196 (E.D. Pa. 2008), which was affirmed by the Third Circuit, 639 F.3d 623 (3d Cir. 2011). Recently my expert report in *West Palm Beach Police Pension Fund v. DFC Global Corp.*, Civ. No. 2:13-cv-06731-BMS (E.D. Pa. Aug. 4, 2016), was

⁶ *Cammer*, 711 F. Supp. at 1287.

Mortgage-backed securities are a type of bond that "represent[s] economic interests in pools of mortgage loans," while corporate bonds represent economic interests in the cash flows of a corporation. Frank J. Fabozzi & Steven V. Mann, *The Handbook of Fixed Income Securities*, 8th Ed. (Kindle locations 12943-47), McGraw-Hill Education Kindle Ed. (2011). ("Handbook").

cited with approval and as support in the court's order certifying the class.⁸ I have also co-authored three law-review articles discussing the commonly used empirical tests applicable to securities class actions.⁹

- 6. I earned my B.A. in economics from the University of Michigan and my M.A. and Ph.D. in economics from the University of Chicago. I have taught economics and financial economics in the Department of Economics at the University of Chicago and jointly in the Michigan Business School (now the Ross School of Business) and the Department of Economics at The University of Michigan.
- 7. At the University of Michigan, I created and taught courses on financial and commodity futures markets. While an Assistant Professor at the University of Michigan, I received a research grant from the University of Chicago Center for the Study of Futures Prices, as well as the John M. Olin Faculty Fellowship to further my research in financial markets. In addition, I published articles in peer-reviewed journals related to financial markets. Prior to my appointment to a tenure-track position at the University of Michigan, I was employed as a Financial Economist at the Commodity Futures Trading Commission, Division of Economics and Education.
- 8. I have been a holder of the Series 7 and 63 registered-representative licenses and have served as a Financial Advisor at Fahnestock & Co., Inc. (now Oppenheimer & Co., Inc.). I was also founder and President of DARMA, LLC, a wealth- and assetadvisory company affiliated with Oppenheimer & Co., Inc.
- 9. My qualifications, publications, and expert engagements are summarized in detail in my curriculum vitae, which is attached to this report as **Appendix A**. Hartzmark Economics Litigation Practice, LLC is being compensated at the rate of \$550 per hour for

W. Palm Beach Police Pension Fund v. DFC Global Corp., 2016 WL 4138613, at *13 (E.D. Pa. Aug. 4, 2016) (finding that "Dr. Hartzmark has data underlying his conclusions and Dr. Marcus just has noise").

Michael L. Hartzmark, Cindy A. Schipani, & H. Nejat Seyhun, Fraud on the Market: Analysis of the Efficiency of the Corporate Bond Market, 2011 Colum. Bus. L. Rev. 654 (2011); Michael L. Hartzmark & H. Nejat Seyhun, The Curious Incident of the Dog That Didn't Bark and Establishing Cause-and-Effect in Class Action Securities Litigation, 6 Va. L. & Bus. Rev. 415 (2012); Michael L. Hartzmark, H. Nejat Seyhun, Understanding the Efficiency of the Market for Preferred Stock, 8 Va. L. & Bus. Rev. 149 (2014).

my work in this matter, and at standard hourly rates for those acting under my supervision and direction. My compensation is not contingent on the opinions expressed or the outcome of the action.

III. SUMMARY

10. Based on my analysis to date, I have formed the following opinions:

Throughout the Class Period, CommVault common stock traded in an open, well-developed and efficient market. This opinion is based on the following evidence:

- (1) The high average weekly turnover of CommVault common stock;
- (2) The continuous coverage of CommVault by analysts, investment professionals, public press, and financial institutions, along with regular and frequent disclosures by the Company in the form of press releases, teleconference earnings calls and SEC filings;
- (3) The fact that CommVault was listed on the NASDAQ;
- (4) The relatively large market capitalization of CommVault common stock;
- (5) The large float of CommVault common stock;
- (6) The narrow bid-ask spread of CommVault common stock;
- (7) The large proportion of institutional holdings of CommVault common stock;
- (8) The variable short interest of CommVault common stock, along with the observation that there are virtually no violations of the put-call parity relationship of CommVault common stock and its options;
- (9) The relationship between CommVault common stock returns on days with value-relevant news versus days with no value-relevant news;
- (10) The rapid price reaction of CommVault common stock to valuerelevant news about CommVault; and

(11) The lack of autocorrelation between past and current abnormal returns of CommVault common stock.

The calculation of damages on a class-wide basis for violations of Section 10(b) of the Exchange Act (and SEC Rule 10b-5) is subject to common methodologies. This opinion is based on the following:

- (1) For a violation of Section 10(b) of the Exchange Act and SEC Rule 10b-5, the common methodology begins with the same type of event study I describe and present in Section VI of this report.
- (2) Using the results of an event study (such as that presented herein) along with firm-specific information, the level of inflation in the prices of CommVault common stock caused or maintained by the Defendants' alleged omissions and misrepresentations can be calculated.
- (3) The daily levels of inflation for CommVault common stock can be calculated throughout the Class Period.
- (4) Using this information, along with Class members' actual purchase and sale activity, individual losses can be calculated from the inflation caused or maintained by the alleged omissions or misrepresentations applying a single common formula for all Class members, consistent with Lead Plaintiffs' theory of liability, namely, that Defendants' misrepresentations and omissions artificially inflated the prices of CommVault common stock, and that this artificial inflation dissipated following the alleged corrective disclosures, which caused the prices of CommVault common stock to fall and in turn caused investor losses.
- 11. In reaching these opinions, I have relied upon various materials, which are listed in **Appendix B**. The research and analysis upon which my opinions are based have been conducted by me with the assistance of personnel working under my direction and supervision. My conclusions are based on information available to me as of the date of

this report. I understand that discovery is ongoing, and I may review, evaluate, and analyze relevant material that becomes available to me in the future. I reserve the right to modify my conclusions based on additional information.

IV. BASES FOR OPINIONS ON EFFICIENCY OF THE MARKET FOR COMMVAULT COMMON STOCK

A. The Academic Definition of Efficient Markets

- 12. A market is defined as being informationally efficient if prices of securities trading in that market reflect all material, publicly available information. Further, informational efficiency means that prices of securities rapidly change to reflect new, unanticipated, material, public information. The notion behind efficient markets is that the competition among investors to discover new profit opportunities pushes security prices to reflect all material, publicly available information.
- 13. The weight of the evidence in the finance literature supports the concept of market efficiency. The father of modern finance and a Nobel prize winner, Eugene Fama, wrote, "We shall conclude that, with but a few exceptions, the efficient markets model stands up well," and "[i]n short, the evidence in support of the efficient markets model is extensive, and (somewhat uniquely in economics) contradictory evidence is sparse." In 1991, Fama updated his analysis and wrote, "The empirical literature on efficiency and asset-pricing models passes the acid test of scientific usefulness." Fama also wrote that "precise inferences about the degree of market efficiency are likely to remain impossible. Nevertheless, judged on how it has improved our understanding of

See Eugene F. Fama, Efficient Capital Markets: A Review of Theory and Empirical Work, 25 J. Fin. 383 (1970) ("A market in which prices always 'fully reflect' available information is called 'efficient'"). Also, "I take the market efficiency hypothesis to be the simple statement that security prices fully reflect all available information." Eugene F. Fama, Efficient Capital Markets: II, 46 J. Fin. 1575 (1991).

Fama, Efficient Capital Markets: A Review of Theory and Empirical Work, 25 J. Fin. at 383.

¹² Id at 416

Fama, Efficient Capital Markets: II, 46 J. Fin. at 1576.

the behavior of security returns, the past research on market efficiency is among the most successful in empirical economics, with good prospects to remain so in the future."¹⁴

B. The Definition of Efficient Markets Generally Accepted by the Courts

- 14. The factors used by courts to determine whether a market is "efficient" for the purposes of establishing the presumption of reliance were articulated by the court in *Cammer*, and courts have since expanded the analysis to examine whether a security trades in an open, well-developed, and efficient market.
- 15. The factors that courts commonly utilize to evaluate the market in which a security trades can be separated into two general categories: "operational factors" and "price-related factors." Using the operational factors, courts have focused on whether the security trades in an open and well-developed market. The operational factors examine the trading and arbitrage activity in the market, with the clear understanding that (a) an open capital market is one in which anyone can buy and sell securities; (b) a developed capital market is one that has a high level of trading activity, and for which trading information is readily available; and (c) a developed capital market can be characterized as a liquid market that can absorb a reasonable amount of trading volume at relatively low trading costs. As a result, the operational factors are primarily used to examine whether there is sufficient liquidity, trading and arbitrage activity, along with widespread

Id. at 1576. See also Eugene F. Fama, Market efficiency, long-term returns, and behavioral finance, 49 J. Fin. Econ. 283 (1998); G. William Schwert, Anomalies and Market Efficiency, in Handbook of the Economics of Finance (G. Constantinides, et al., eds., 2003); and Burton G. Malkiel, The Efficient Market Hypothesis and Its Critics, 17 J. Econ. Perspectives 59 (2003).

[&]quot;A developed market is one which has a relatively high level of activity and frequency, and for which trading information (e.g., price and volume) is widely available. It is principally a secondary market in outstanding securities. It usually, but not necessarily, has continuity and liquidity (the ability to absorb a reasonable amount of trading with relatively small price changes)." *Cammer*, 711 F. Supp. at 1276 n.17 (citing Bromberg & Lowenfels, 4 *Securities Fraud and Commodities Fraud* § 8.6 (1988)).

Economists often suggest that "[t]he common metrics of liquidity are turnover, bid-ask spread, and transactional size." *Handbook,* Kindle locations 7729-30. This is also consistent with the operational *Cammer* factors.

information dissemination, such that the market price for the security can reasonably be expected to rapidly reflect new information.¹⁷

- 16. The operational factors set forth in *Cammer* include whether:
 - (1) there is high average weekly turnover of the common stock;¹⁸
 - (2) there is continuous coverage of the common stock by investment professionals, along with regular disclosures by the company;¹⁹
 - (3) there is a relatively high number of market makers or dealers of the common stock, along with arbitrageurs;²⁰ and
 - (4) the issuer of the common stock is eligible to file SEC Form S-3 and to incorporate by reference its other SEC filings.²¹

[&]quot;In an open and developed market, the dissemination of material misrepresentations or withholding of material information typically affects the price of the stock, and purchasers generally rely on the price of the stock as a reflection of its value." *Peil v. Speiser*, 806 F.2d 1154, 1161 (3d Cir. 1986).

[&]quot;Indeed, nearly every court that has considered the proposition has concluded that where materially misleading statements have been disseminated into an impersonal, well-developed market for securities, the reliance of individual plaintiffs on the integrity of the market price may be presumed." *Basic*, 485 U.S. at 247.

[&]quot;[A] verage weekly trading of two percent or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; one percent would justify a substantial presumption." *Cammer*, 711 F. Supp. at 1286.

[&]quot;Second, it would be persuasive to allege a significant number of securities analysts followed and reported on a company's stock during the class period." *Id. See also Teamsters Local* 445 Freight Div. Pension Fund v. Bombardier, Inc., 546 F.3d 196, 205 (2d Cir. 2008) ("[T]he greater the number of securities analysts following and reporting on a company's stock, the greater the likelihood that information released by a company is being relied upon by investors.") (quoting *In re Xcelera.com Sec. Litig.*, 430 F.3d 503, 514 (1st Cir. 2005)).

²⁰ "Third, it could be alleged the stock had numerous market makers. The existence of market makers and arbitrageurs would ensure completion of the market mechanism; these individuals would react swiftly to company news and reported financial results by buying or selling stock and driving it to a changed price level." *Cammer*, 711 F. Supp. at 1286-87.

[&]quot;Fourth, as discussed, it would be helpful to allege the Company was entitled to file an S-3 Registration Statement in connection with public offerings or, if ineligible, such ineligibility was only because of timing factors rather than because the minimum stock requirements set forth in the instructions to Form S-3 were not met." *Cammer*, 711 F. Supp. at 1287. *See also id.* at 1271 n.5 ("Generally speaking, it is the largest and most well-known companies which register equity securities on Form S-3"); *id.* at 1284 (quoting SEC Securities Act Release No.

- 17. The court in *Krogman* suggested three additional operational factors:
 - (1) there is a relatively large market capitalization of the common stock;²²
 - (2) there is a reasonably small bid-ask price spread;²³ and
 - (3) there is a sufficiently large float of common stock (i.e., the amount of outstanding common stock not held by insiders of the corporation).²⁴
- 18. In addition to the *Cammer* and *Krogman* factors, some courts have also suggested that other factors may be relevant to determining whether a market is open, well-developed and efficient for class-certification purposes, including whether there is a

6331, 46 Fed. Reg. 41,902 (Aug. 13, 1981)) ("This form [S-3] is predicated on the Commission's belief that the market operates efficiently for these companies, i.e., that the disclosure in Exchange Act reports and other communications by the registrant, such as press releases, has already been disseminated and accounted for by the market place.") (Emphasis omitted).

In *Krogman*, the court suggested that "[m]arket capitalization, calculated as the number of shares multiplied by the prevailing share price, may be an indicator of market efficiency because there is a greater incentive for stock purchasers to invest in more highly capitalized corporations." 202 F.R.D. at 478. This was also alluded to by the *Cammer* court: "Again, it is the number of shares traded and value of shares outstanding that involve the facts which imply efficiency." 711 F. Supp. at 1287.

See Krogman, 202 F.R.D. at 478: "A large bid-ask spread is indicative of an inefficient market, because it suggests that the stock is too expensive to trade."

Insiders cannot freely trade in the stock of their company based on their privileged, nonpublic information. They are subject to both trading restrictions (blackout periods and restrictions under Rule 10b-5 and Exchange Act Sections 16(b) and 16(c)) and the reporting requirements of Section 16(a). See 17 C.F.R. §240.10b-5 (2011); 15 U.S.C. §§78p(b), 78p(c), 78p(a) (2011). "In determining efficiency, courts also consider the percentage of shares held by the public, rather than insiders." Krogman, 202 F.R.D. at 478.

relatively large proportion of institutional holdings of the common stock,²⁵ and whether there are opportunities for arbitrage.²⁶

19. The price-related factors are primarily used to directly examine whether the market price for the security rapidly reflects unanticipated information relevant to future cash flows, as would be expected in what economists and courts generally refer to as an "efficient market."²⁷

20. Price-related factors include:

(1) whether there is a rapid price reaction to new information relevant to the valuation of the common stock;²⁸ and

For example, in *In re Enron Corp. Securities, Derivative & "ERISA" Litigation*, the court decided that Enron bonds traded in efficient markets partially based on "data on institutional holdings . . . [that] there was active trading . . . during the Class Period, [and] there were a substantial number of institutional investors." 529 F. Supp. 2d 644, 756 (S.D. Tex. 2006).

[&]quot;Consistent with the efficiency indicators used recently by the courts, the inefficient firms have lower mean trading volume, fewer market makers, lower analyst following, and lower institutional ownership (number and percentage) than efficient firms." Brad M. Barber, Paul A. Griffin, & Baruch Lev, *The Fraud-on-the-Market Theory and the Indicators of Common Stock Efficiency*, 19 J. Corp. L. 285, 302 (1994) (footnote omitted).

²⁶ See In re PolyMedica Corp. Sec. Litig., 453 F. Supp. 2d 260, 273 (D. Mass. 2006) ("This Court rejects the assertion that arbitrage is the *only* mechanism of information efficiency, but accepts that the significant role of arbitrageurs toward that end is widely acknowledged in academic commentary.") (emphasis in original) (footnote omitted).

In determining "whether it [is] proper . . . to apply a rebuttable presumption of reliance, supported in part by the fraud-on-the-market theory.' . . . [T]he plaintiff 'must allege and prove . . . that the shares were traded on an efficient market' before a trial court may invoke the presumption." *Cammer*, 711 F. Supp. at 1290 (quoting *Basic*, 485 U.S. at 242, 248 n.27) (footnote omitted).

[&]quot;An efficient market is one which rapidly reflects new information in price. These terms are cumulative in the sense that a developed market will almost always be an open one. And an efficient market will almost invariably be a developed one." *Cammer*, 711 F. Supp. at 1276 n.17 (citing Bromberg & Lowenfels, 4 *Securities Fraud and Commodities Fraud* § 8.6 (1988)).

[&]quot;Finally, it would be helpful to a plaintiff seeking to allege an efficient market to allege empirical facts showing a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price. This, after all, is the essence of an efficient market and the foundation for the fraud on the market theory." *Cammer*, 711 F. Supp. at 1287.

- (2) whether there are certain statistical properties associated with common stock price movements, such as the lack of autocorrelation.²⁹
- 21. The language used by the *Cammer* court that "[t]here are several different characteristics pertaining to the markets for individual stocks which are probative of the degree to which the purchase price of a stock should reflect material company disclosures," also should apply to the other factors described above. In other words, these factors should be used as a basket of indicators of the degree to which the security market is open, well developed and efficient. By no means is it necessary that each factor in that basket offer support. 32

²⁹ "Autocorrelation is usually found in time-series data. Economic time series often display a 'memory' in that variation is not independent from one period to the next." William H. Greene, *Econometric Analysis* 358 (Prentice Hall, 2d ed. 1993).

In other words, autocorrelation is the measurement of the relationship between the security return at time t and the return of the same security at some fixed time in the past. First-order autocorrelation would be found when there is a statistically significant relationship between the common stock return today and the common stock return yesterday. Another way of looking at this concept is that if an observer can use the return from yesterday to predict with some level of certainty the return today, there exists autocorrelation. *See Lehocky v. Tidel Techs., Inc.*, 220 F.R.D. 491, 506-07 n.20 (S.D. Tex. 2004) (noting that both parties' experts agreed on the helpfulness of autocorrelation).

³⁰ *Cammer*, 711 F. Supp. at 1283.

This was recently reiterated in *Halliburton Co. v. Erica P. John Fund, Inc.*: "Moreover, in making the presumption rebuttable, *Basic* recognized that market efficiency is a matter of degree and accordingly made it a matter of proof. Halliburton has not identified the kind of fundamental shift in economic theory that could justify overruling a precedent on the ground that it misunderstood, or has since been overtaken by, economic realities." 134 S. Ct. 2398, 2403 (2014) ("*Halliburton II*").

[&]quot;The vast majority of courts have used the *Cammer* factors as 'an analytical tool rather than as a checklist.' Indeed, not even the *Cammer* court considered the fifth factor necessary, stating only that 'it would be helpful to a plaintiff seeking to allege an efficient market" *Carpenters Pension Trust Fund of St. Louis v. Barclays PLC*, 2015 U.S. Dist. LEXIS 110382, at *33 (S.D.N.Y. 2015).

[&]quot;Different contexts require courts to place greater importance on some factors than on others. No other court has adopted a per se rule that any one factor is dispositive. At the same time, courts have found market efficiency in the absence of an event study or where the event study was not definitive." *Carpenters Pension Trust Fund of St. Louis*, 2015 U.S. Dist. LEXIS 110382, at *34.

- 22. In forming my opinion in this matter that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period, I have considered each of these operational and price-related factors.
- 23. Finally, although I will show in this report that there is extensive evidence that CommVault common stock traded in an open, well-developed and efficient market, I note that the empirical analyses herein go well beyond what the Supreme Court has required plaintiffs to demonstrate in *Halliburton II*. There, the Court reaffirmed *Basic*:

The Court in *Basic* acknowledged, however, the debate among economists about the efficiency of capital markets and refused to endorse "any particular theory of how quickly and completely publicly available information is reflected in market price." The Court instead based the presumption of reliance on the fairly modest premise that "market professionals generally consider most publicly announced material statements about companies, thereby affecting stock market prices." Moreover, in making the presumption rebuttable, *Basic* recognized that market efficiency is a matter of degree and accordingly made it a matter of proof.³³

V. ANALYSIS OF OPERATIONAL FACTORS OF COMMVAULT COMMON STOCK

A. Background

24. In its fiscal year 2014 SEC Form 10-K (for the fiscal year ended March 31, 2014), CommVault described itself as follows:

CommVault is a leading provider of data and information management software applications and related services. ... We develop, market and sell data and information management software applications under the Simpana® Software brand. Simpana software is built from the ground up on a single platform and unified code base for integrated data and information management. The Simpana platform contains

[&]quot;It is widely accepted that analysis of the *Cammer* and *Krogman* factors is a reliable and accepted methodology for establishing market efficiency." *Carpenters Pension Trust Fund of St. Louis*, 2015 U.S. Dist. LEXIS 110382, at *49.

³³ *Halliburton II* at 2403 (quoting *Basic*, 485 U.S. at 247, 248, nn. 24 & 28).

licensable modules that work together seamlessly, sharing a single code and common function set to deliver Backup and Recovery, Archive, Replication, Search & eDiscovery and Analytic capabilities across physical, virtual and cloud environments. With a single platform approach, Simpana software is specifically designed to protect, manage and access data throughout its lifecycle in less time, at lower cost and with fewer resources than alternative solutions.³⁴

- 25. Throughout the Class Period, CommVault common stock was listed on the NASDAQ Global Market under the "CVLT" trading symbol.³⁵ CommVault is a Delaware company incorporated in 1996 with its headquarters in New Jersey.³⁶
- 26. As of May 7, 2013 (the first day of the Class Period), CommVault had 46,480,599 shares of common stock outstanding.³⁷
- 27. As of April 25, 2014 (the day following the end of the Class Period), CommVault had 47,186,646 shares of common stock outstanding.³⁸
- 28. CommVault repurchased 776,839 shares of common stock from January 2014 through June 2014.³⁹

CommVault SEC Form 10-K for 2014 filed May 2, 2014 p. 4.

CommVault SEC Form 10-Ks for 2013, 2014, and 2015, at pp. 35, 29, and 32, respectively. According to Bloomberg, CommVault was listed on the NASDAQ Global Select Market throughout the Class Period.

³⁶ CommVault SEC Form 10-K for 2014 filed May 2, 2014, pp. 4 and 28.

Based on shares outstanding as of April 29, 2013. "As of April 29, 2013, there were 46,480,599 shares of the registrant's common stock (\$0.01 par value) outstanding." CommVault SEC Form 10-K for fiscal 2013 filed May 14, 2013, cover.

CommVault SEC Form 10-K filed May 2, 2014, cover (as of March 31, 2014, CommVault had 47.09 million shares outstanding, SEC Form 10-K filed May 2, 2014, p. 50). "As of April 25, 2014, there were approximately 59 holders of our common stock. The number of record holders does not represent the actual number of beneficial owners of shares of our common stock because shares are frequently held in street name by securities dealers and others for the benefit of individual owners who have the right to vote their shares." CommVault SEC Form 10-K for fiscal 2014 filed May 2, 2014, p. 29.

³⁹ SEC Form 10-K for 2014 filed May 2, 2014: CommVault repurchased 63,300 shares in January 2014, 676,700 shares in February 2014, and 34,700 shares in March 2014 (p. 31). SEC Form 10-Q for 1Q2015 filed July 31, 2014: CommVault repurchased 2,139 shares in the first quarter of 2015 (p. 11).

29. Throughout the Class Period there was also an active market for options on CommVault common stock.⁴⁰ The Company did not pay any dividends during the Class Period.⁴¹

B. Operational Cammer Factors to Weigh When Examining Market Efficiency

1. Cammer Factor I – Weekly Trading Volume

- 30. The first operational factor is the weekly trading volume of a security. As discussed in the *Cammer* opinion: "average weekly trading of two percent or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; one percent would justify a substantial presumption." It is generally accepted that a high trading volume indicates substantial investor interest in the security, and thus increases the likelihood that newly available public information will be rapidly incorporated in the security price through trading. In addition, high volume suggests the possibility that investors will, all other factors staying constant, be able to reap greater profits from any value-relevant information they may possess because they can more easily participate in the market. This greater profit opportunity from the information they may possess then encourages investors to make greater investments in information gathering and processing. This, in turn, will help the informational efficiency of the market.
- 31. To reliably determine whether the turnover fulfills this *Cammer* criterion, I calculated average weekly turnover over the Class Period, which is equal to the average of the ratio of weekly volume divided by the shares outstanding for that week.⁴³
- 32. **Exhibit I** contains the results of this analysis and shows that for the Class Period a total of 154.4 million shares traded hands with an average weekly volume of 3.2

⁴⁰ Source: iVolatility.

CommVault SEC Form 10-K for fiscal 2015 filed May 8, 2015, p. 32.

⁴² *Cammer*, 711 F. Supp. at 1286.

The trading volume I utilize for the turnover analysis is the composite daily reported trading volume, which I obtained from Bloomberg. The source for shares outstanding is CommVault SEC filings.

million shares.⁴⁴ As it relates to this *Cammer* factor, the ratio of the average weekly volume to shares outstanding was 6.8% and the median was 5.6%, which "would justify a strong presumption that the market for the security is an efficient one..."

33. The high average weekly turnover of CommVault common stock constitutes substantial evidence justifying a strong presumption that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.

2. Cammer Factor II – Analyst Coverage

- 34. The second operational factor is the number of security analysts who followed and reported on CommVault's common stock. As discussed in *Cammer*: "[I]t would be persuasive to allege a significant number of securities analysts followed and reported on a company's stock during the class period."⁴⁶ As more analysts follow and report on a company's securities, more information about the company is disseminated to a greater number of investors. The presence of a substantial number of such professionals means that more information is likely to be reflected in the price of these securities either through increased trading or simply through revaluation of the securities by the market participants.
- 35. As **Exhibit II** shows, throughout the Class Period (and the corrective disclosure day of April 25, 2014) there were between 15 and 20 analysts following the Company as recorded by Bloomberg or Thomson Reuters I/B/E/S consensus EPS estimate for the current fiscal year.⁴⁷ Analyst coverage included the following analysts: BMO Capital Markets, Craig-Hallum, Credit Suisse, Goldman Sachs Group, Jefferies, JMP Securities, Lake Street Capital Markets, Lazard, Macquarie Research, Mizuho

The average weekly volume includes the entire weeks of the start date and end date of the Class Period. In **Exhibit I,** I also provide the analysis excluding the weeks that include the start and end dates of the Class Period. The results are virtually the same under both methods, as 3.2 million goes to 3.0 million and 6.8% goes to 6.4%.

⁴⁵ *Cammer*, 711 F. Supp. at 1286.

⁴⁶ Cammer, 711 F. Supp. at 1286. See also Xcelera, 430 F.3d at 514 ("[T]he greater the number of securities analysts following and reporting on a company's stock, the greater the likelihood that information released by a company is being relied upon by investors.").

⁴⁷ Sources: Bloomberg and S&P Capital IQ.

Securities, Needham Co., Oppenheimer, Pacific Crest Securities, Piper Jaffray, Raymond James, RBC Capital Markets, Sterne Agee, Stifel Nicolaus, Summit Research, and William Blair. See Exhibit III-A for a listing of the number of reports from these analysts. This exhibit shows that there were over 400 reports published during the Class Period and the corrective disclosure date of April 25, 2014 (including quantitative analysts such as EVA Dimensions, Jefferson Research & Management, TheStreet.Com Ratings, and Zacks). 49

- 36. The substantial coverage of CommVault's stock by analysts can also be observed in analysts' participation in conference calls held by CommVault. Many of these analysts participated in the regular earnings calls CommVault hosted in conjunction with the release of its quarterly financial results, and many of the analysts hosted investor conferences in which CommVault participated during the Class Period. CommVault held five conference calls during the Class Period (and the corrective disclosure day of April 25, 2014). On these conference calls, analysts and other investors were able to ask questions about CommVault, with an average of 13 analysts participating on each call. See Exhibit III-B for a list of analysts asking questions during CommVault conference calls. There were also six investor conferences hosted by analysts during the Class Period at which CommVault participated. See Exhibit III-C for a list of analysts hosting investor conferences at which CommVault participated.
- 37. The number of analysts following CommVault compares favorably to the number following the defendant companies at issue in other matters, where the courts concluded that the common stock traded in efficient markets.⁵¹

Based on reports provided by Counsel or available on the S&P Capital IQ, Thomson Reuters Knowledge and Thomson ONE databases. Additional analysts were identified based on participation in conference calls and their hosting of investor conferences.

⁴⁹ For this analysis, multiple reports issued by the same analyst on the same date are counted as a single report. Reports from the same analyst from different databases that have the same titles but different dates are treated as being released on the first date listed in the databases.

During the Class Period, CommVault held earnings calls after each quarterly earnings release.

See, e.g., Billhofer v. Flamel Techs., S.A., 281 F.R.D. 150, 153-54 (S.D.N.Y. 2012) (finding that eight separate firms issued reports about Flamel, four additional firms participated in

- 38. In addition to the analyst reports, there were numerous press releases, news stories and other media coverage of CommVault throughout the 244 trading-day Class Period (and the additional disclosure date of April 25, 2014). (*See* **Appendix C** for a chronology of media coverage.) I found over 800 articles (including approximately 400 articles from Bloomberg and approximately 400 from Factiva⁵²) that discussed CommVault.⁵³ Other articles may still be available from additional sources (e.g., by searching Google, Yahoo, etc.).⁵⁴
- 39. Finally, as a public company, CommVault was required to file numerous information disclosures in SEC forms that contain new and possibly material information (e.g., Form 10-K, Form 10-Q, and Proxy and Registration Statements) and others that were related to current and possibly material news about the Company (e.g., Form 8-K).
- 40. The continuous coverage of CommVault by analysts, investment professionals, public press, and financial institutions, along with regular and frequent disclosures by the Company in the form of press releases and SEC filings, supports the conclusion that CommVault common stock traded in an open, well-developed, and efficient market throughout the Class Period.

3. Cammer Factor III – Market Makers

41. The next operational factor is the presence of market makers and arbitrageurs. As discussed in *Cammer*, "[t]he existence of market makers and arbitrageurs would ensure completion of the market mechanism; these individuals would react swiftly to company news and reported financial results by buying or selling stock and driving it to a changed price level." This factor, as suggested by the *Cammer* court,

investor conferences, and more than two dozen articles and press releases were published about Flamel, supporting a finding of market efficiency).

Factiva, Inc. is a Dow Jones Company.

⁵³ See infra note 120.

In addition, a search on Lexis--Nexis for the terms "CommVault Systems" using "All English Language News" yields over 1,250 stories (without checking for duplicates). These stories are not in **Appendix C**.

⁵⁵ Cammer, 711 F. Supp. at 1286-87. See also In re Xcelera.com, 430 F.3d at 515 ("A market-maker is 'one who helps establish a market for securities by reporting bid-and-asked

related to a stock that was traded in the 1980's over-the-counter or on the early version of NASDAQ (which at the time was not a national exchange, but instead was a reporting network in which transactions in securities were reported to the National Association of Securities Dealers for publication).⁵⁶ The *Cammer* court understood that the market-making infrastructure of a stock market is indicative of its efficiency, or lack thereof, and is relevant for evaluating whether the common stock trades on an open, well-developed and efficient market.⁵⁷ According to CommVault's SEC Form 10-K, the Company's common stock traded on the NASDAQ Global Market during the Class Period.⁵⁸ The NASDAQ National Market System is one of the most renowned, most liquid, and most efficient forums for trading stocks in the world. The NASDAQ exchange is decentralized and includes the participation of multiple *market makers*, dealers or financial intermediaries who stand ready to buy or sell in order to ensure there is adequate liquidity and orderly trading.⁵⁹ Because market makers make it easier for investors to execute trades in a timely fashion and with reasonable transaction costs, a larger number of

quotations' (the price a buyer will pay for a security and the price a seller will sell a security).") (quoting *Black's Law Dictionary* (8th ed. 2004)); *id.* (A market-maker also "stands ready to buy or sell at these publicly quoted prices.") (quoting *Lehocky v. Tidel Techs., Inc.*, 220 F.R.D. 491, 508 n.24 (S.D. Tex. 2004)).

⁵⁶ *Cammer*, 711 F. Supp. at 1271 n.4.

⁵⁷ See also supra note 20.

SEC Form 10-K filed May 2, 2014 for the year ended March 31, 2014, p. 29. According to Bloomberg, CommVault was listed on the NASDAQ Global Select Market throughout the Class Period.

The NASDAQ consists of three tiers: the NASDAQ Global Select Market, the NASDAQ Global Market, and the NASDAQ Capital Market. The listing requirements are most stringent for the Global Select Market, followed by the Global Market, and then the Capital Market. *See* NASDAQ Initial Listing Guide, January 2017, p. 5, available at: https://listingcenter.nasdaqomx.com/assets/initialguide.pdf (last visited April 18, 2017).

The difference in trading between the NYSE and NASDAQ has diminished. A recent study concludes that: "This study provides evidence of the homogenization of trading in the United States. The empirical results show that two significant characteristics of market quality—trading volume and transitory volatility—have become indistinguishable, on average, between NASDAQ stocks and those listed at the traditional listing [NYSE] exchanges. These results provide concrete evidence of a reality that is obvious to most practitioners: The market structures used for trading stocks are now essentially the same regardless of their primary listing markets." Lawrence Harris, *The Homogenization of US Equity Trading*, Working Paper, September 30, 2011, p. 2.

market makers, not only signals more widespread interest and participation in the market for the particular security, but results generally in a higher degree of liquidity and narrower bid-ask spreads. These are attributes of open, well-developed and efficient markets.

42. When the *Cammer* court issued its decision in 1989, over-the-counter trading and NASDAQ were very different than today. With innovations in electronic trading, NASDAQ has become a national exchange and has grown to rival the NYSE in size, liquidity and information dissemination.⁶⁰ According to the 10-K filed by NASDAQ OMX for 2013, "[NASDAQ is] a leading global exchange group that delivers trading, clearing, exchange technology, regulatory, securities listing, and public company services across six continents."⁶¹ "The NASDAQ Stock Market is the largest single cash equities securities market in the U.S. in terms of listed companies and in the world in terms of share value traded."⁶² As of December 31, 2013, "[t]he NASDAQ Stock Market was home to 2,637 listed companies with a combined market capitalization of approximately \$7.0 trillion."⁶³ Furthermore, as on its competitor, the NYSE, "[c]ompanies seeking to list securities on The NASDAQ Stock Market must meet minimum listing requirements, including specified financial and corporate governance criteria. Once listed, companies must meet continued listing standards."⁶⁴

43. In most securities litigation, the exchange-traded securities either trade on the NYSE or NASDAQ. The structures of these exchanges, in combination with the

⁶⁰ For example, in 2007, NASDAQ became a "fully operational as an independent registered national securities exchange." The Nasdaq OMX Group, Inc., SEC Form 10-K filed February 24, 2014 for the year ended December 31, 2013, p. 2.

Id. at 2. The 10-K further states, "Our global offerings are diverse and include trading and clearing across multiple asset classes, market data products, financial indexes, capital formation solutions, financial services, corporate solutions and market technology products and services. Our technology powers markets across the globe, supporting derivatives trading, clearing and settlement, cash equity trading, fixed income trading and many other functions. In the U.S., we operate The NASDAQ Stock Market, a registered national securities exchange." Id.

⁶² *Id.* at 2.

⁶³ *Id.* at 2.

⁶⁴ *Id.* at 6.

requirements for being listed, have led to the general presumption by economists and the courts that common stocks traded on these exchanges trade in an efficient market. Courts (and economists) have generally presumed that common stocks traded on the NASDAQ trade in an efficient market.⁶⁵ In the recent *Groupon* decision, the court noted that even the defendants' economic expert conceded that most securities traded on the NASDAQ exchange traded in an efficient market.⁶⁶

44. Therefore, CommVault investors benefitted from having market makers, who competed against one another. For CommVault specifically, these 94 financial intermediaries competed minute-by-minute, day-by-day, and risked their own capital and utilized the most advanced information technology, and their sophisticated research teams assisted investors by improving liquidity and information dissemination.⁶⁷ Demonstrating that there was active participation by a substantial number of brokers, **Exhibit IV-A** shows that 10 of the brokers traded in excess of one percent of the total

Lumen v. Anderson, 280 F.R.D. 451, 459 (W.D. Mo. 2012) ("It would be remarkable for a court to conclude NASDAQ is not an efficient market").

In Nguyen v. Radient Pharm. Corp., the court quoted In re Initial Pub. Offering Sec. Litig., 544 F. Supp. 2d 277, 296 n.133 (S.D.N.Y. 2008): "'[T]he federal courts are unanimous in their agreement that a listing on the NASDAQ or a similar national market is a good indicator of efficiency." Nguyen vs. Radient Pharm. Corp., 287 F.R.D. 563, n.7 (C.D. Cal. 2012).

[&]quot;While other courts have been reluctant to conclude that a stock was traded efficiently solely because it was traded on the NYSE or NASDAQ, most courts agree that such listing is a good indicator of efficiency." *Carpenters Pension Trust Fund of St. Louis v. Barclays PLC*, 2015 U.S. Dist. LEXIS 110382, at *26.

[&]quot;In most cases, evidence that a stock trades at high volumes on a large national market, such as the NYSE or NASDAQ, and is followed by a large number of analysts will be sufficient to satisfy the *Basic* presumption on class certification." *Id.* at *33.

[&]quot;Dr. Gompers, Defendants' expert, did not dispute Dr. Feinstein's conclusions that (1) the NASDAQ exchange—on which Groupon shares traded—was a well-developed exchange on which most company's stocks traded efficiently most of the time…." In re Groupon, Inc. Sec. Litig., 2015 WL 1043321, at *5 (N.D. Ill. Mar. 5, 2015) (empahsis added). See also In re Initial Pub. Offering Sec. Litig., 243 F.R.D. 79, 91 (S.D.N.Y. 2007) (characterizing NASDAQ as an efficient market).

⁶⁷ Many market makers not only serve as intermediaries, but also trade for their own accounts.

volume and 14 traded over 0.1% of the total volume.⁶⁸ **Exhibit IV-B** also lists 70 additional brokers that traded CVLT common stock.

45. Therefore, the fact that CommVault was listed on the NASDAQ Global Market⁶⁹ and had at least 10 active market makers, as well as many other less active market makers, standing ready to buy or sell, provides evidence supporting the conclusion that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.

4. Cammer Factor IV-SEC Form S-3 Eligibility

- 46. This *Cammer* factor states that eligibility to file SEC Form S-3 "[i]s an important factor weighing in favor of a finding that a market is efficient." The eligibility to file short Forms S-3 and S-4 is reserved for those firms that have sufficiently large market capitalizations and have met all reporting requirements throughout the past twelve consecutive months.
- 47. The significance of this particular factor is underscored by the SEC's explanation of the rationale for permitting certain companies to incorporate by reference the companies' other SEC filings in the Form S-3 (or S-4) registration statement: "This form [S-3 or S-4] is predicated on the Commission's belief that the market operates

Other courts have found that a security traded in an open, developed and efficient market with fewer market makers than CommVault. For example, in *Daniel McIntire v. China MediaExpress Holdings, Inc.*, 38 F. Supp. 3d 415, 432 (S.D.N.Y 2014), the court held: "[an expert], using NASDAQ's definition, identified an average of 20 registered market makers for CCME during the Class Period. He observed that during no week in the Class Period did CCME have fewer than 14 market makers, which is the average for a typical NASDAQ-listed stock. The Court is satisfied that CCME's 20-market-maker average supports a presumption of market efficiency." *See In re Winstar Commc'ns Sec. Litig.*, 290 F.R.D. 437, 447 (S.D.N.Y. 2013) (showing of six large banks acting as market makers was sufficient evidence of market efficiency); *In re Initial Pub. Offering Sec. Litig.*, 260 F.R.D. 81, 100 (S.D.N.Y. 2009) (14 market makers sufficient to establish market efficiency); *Cammer*, 711 F. Supp. at 1293 (10 market makers sufficient for a showing of market efficiency)."

⁶⁹ According to Bloomberg, CommVault was listed on the NASDAQ Global Select Market throughout the Class Period.

⁷⁰ "Fourth, as discussed, it would be helpful to allege the Company was entitled to file an S-3 Registration Statement in connection with public offerings or, if ineligible, such ineligibility was only because of timing factors rather than because the minimum stock requirements set forth in the instructions to Form S-3 were not met." *Cammer*, 711 F. Supp. at 1285, 1287.

efficiently for these companies, i.e., that the disclosure in Exchange Act reports and other communications by the registrant, such as press releases, has already been disseminated and accounted for by the market place." Implicit in the SEC's allowing firms to incorporate information in their registration statements by reference to other filings is that the information in the other filings is widely disseminated, and that the security trades in an efficient market.

48. At all times throughout the Class Period, CommVault met the requirements to file an SEC Form S-3, including having a public float of at least \$75 million in common stock.⁷² Therefore, the fact that CommVault was eligible to file SEC Form S-3 further supports the conclusion that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.

C. Other Operational Factors to Weigh When Examining Market Efficiency

49. In addition to the operational *Cammer* factors evaluated above, I have also considered additional operational factors that have sometimes been considered by courts. As with the operational *Cammer* factors, these additional operational factors all support my conclusion that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.

1. Krogman Factor – Market Capitalization

50. In *Krogman*, the court stated that "[m]arket capitalization, calculated as the number of shares multiplied by the prevailing share price, may be an indicator of market efficiency because there is a greater incentive for stock purchasers to invest in more highly capitalized corporations." Market capitalization is an important factor in complying with NASDAQ's listing requirement and is highly correlated with trading volume, analyst following, and press coverage – factors considered in *Cammer* (as discussed above).

⁷¹ *Id.* at 1284 (quoting SEC Securities Act Release No. 6235 (Sept. 10, 1980)).

SEC 1379, "Form S-3, Registration Statement under the Securities Act of 1933, General Instructions," updated January 2012, at 4.

⁷³ *Krogman*, 202 F.R.D. at 478.

- 51. At the start of the Class Period, CommVault's market capitalization was \$3.55 billion, and at the end of the Class Period it was \$3.23 billion.⁷⁴ Throughout the Class Period CommVault's market capitalization ranged from \$2.94 billion to \$4.21 billion. *See* Exhibit V.
- 52. For comparison purposes, on May 7, 2013, the start of the Class Period, CommVault's market capitalization as compared to other NASDAQ common stocks placed it in the 92nd percentile. This means that 92% of the companies in the NASDAQ Composite Index sample had *lower* market capitalizations than CommVault. For an additional comparison, on October 1, 2013, the peak of CommVault's market capitalization, CommVault's market capitalization as compared to other NASDAQ common stocks placed it in the 91st percentile. This means that 91% of the companies in the NASDAQ Composite Index sample had *lower* market capitalizations than CommVault. For a third comparison, on January 28, 2014, the trading day prior to the first alleged corrective disclosure, CommVault's market capitalization as compared to the common stocks of other NASDAQ-listed companies places it in the 90th percentile. This means that 90% of the companies in the NASDAQ Composite Index sample had *lower* market capitalizations than CommVault. For a fourth comparison, on April 24, 2014,

Based on the \$76.33 closing price and approximately 46.48 million shares outstanding as of May 7, 2014, and the \$68.58 closing price and approximately 47.09 million shares outstanding as of April 24, 2014.

For this analysis, I compared CommVault's market capitalization to that of the 2,254 members of the NASDAQ Composite Index (Bloomberg ticker: CCMP) as of May 7, 2013 that have a Bloomberg "Security Type" of "common stock" and "Primary Security Composite Exchange Code" of "US." The Bloomberg data obtained for each member was "Current Market Cap."

For this analysis, I compared CommVault's market capitalization to that of the 2,265 members of the NASDAQ Composite Index (Bloomberg ticker: CCMP) as of October 1, 2013 that have a Bloomberg "Security Type" of "common stock" and "Primary Security Composite Exchange Code" of "US." The Bloomberg data obtained for each member was "Current Market Cap."

For this analysis, I compared CommVault's market capitalization to that of the 2,271 members of the NASDAQ Composite Index (Bloomberg ticker: CCMP) as of January 28, 2014 that have a Bloomberg "Security Type" of "common stock" and "Primary Security Composite Exchange Code" of "US." The Bloomberg data obtained for each member was "Current Market Cap."

the trading day prior to the final alleged corrective disclosure, CommVault's market capitalization as compared to other NASDAQ common stocks placed it in the 89th percentile. This means that 89% of the companies in the NASDAQ Composite Index sample had *lower* market capitalizations than CommVault.⁷⁸

53. CommVault's large market capitalization provides evidence supporting the conclusion that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.

2. Krogman Factor – The Size of the Float of CommVault Common Stock

- 54. Float or public float refers to the number of shares of CommVault common stock that are *not* held by insiders⁷⁹ of the corporation.⁸⁰ Consequently, a larger float relative to the total number of outstanding shares of CommVault common stock indicates there are a large proportion of CommVault shares that are available to non-insiders who can trade without restrictions and profit by trading on new information to the marketplace.
- 55. On average, insiders held 2.97 million or only 6.3% of the average shares outstanding during the Class Period.⁸¹ The public float ranged from approximately 93.6% to 93.7% of CommVault's market capitalization, as graphed in **Exhibit V**. The capitalization of the public float ranged from \$2.76 billion to \$3.95 billion, with an average of \$3.34 billion. Therefore, the average public float of 44.06 million shares, or

For this analysis, I compared CommVault's market capitalization to that of the 2,306 members in the NASDAQ Composite Index (Bloomberg ticker: CCMP) as of April 24, 2014 that have a Bloomberg "Security Type" of "common stock" and "Primary Security Composite Exchange Code" of "US." The Bloomberg data obtained for each member was "Current Market Cap."

Insiders cannot freely trade in the stock of their company based on their privileged, nonpublic information. They are subject to both trading restrictions (blackout periods and the restrictions of Sections 10(b), 16(b), and 16(c) of the Exchange Act), as well as the reporting requirements of Section 16(a) of the Exchange Act.

[&]quot;In determining efficiency, courts also consider the percentage of shares held by the public, rather than insiders." *Krogman*, 202 F.R.D. at 478.

Insider holdings were obtained from proxy filings. Insider holdings include shares held by directors and officers as a group, excluding exercisable options and stock units.

- 93.7% of the outstanding shares, meant there were an adequate number and proportion of shares available to trade by investors.
- 56. The large float further supports the conclusion that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.

3. Krogman Factor – Bid-Ask Spread

- 57. The size of the bid-ask spread (*i.e.*, ask quote minus bid quote) in the market for a security is an indication of the liquidity in the market, and is sometimes considered a factor in determining whether the security trades in an efficient market. In *Krogman*, the court stated that "[a] large bid-ask spread is indicative of an inefficient market, because it suggests that the stock is too expensive to trade."⁸²
- 58. I calculated statistics describing CommVault's bid-ask spread using time-weighted spreads based on intraday bid and ask quotes.⁸³ Using "NBBO" bid and ask quotes during the day session, I had 4,459,310 observations.⁸⁴
- 59. Using this information, I calculated the percent bid-ask spread.⁸⁵ The percent bid-ask spread was calculated as (i) the ask quote less the bid quote divided by (ii) the average of the bid and ask quotes. Within each day, the number of milliseconds

⁸² *Krogman*, 202 F.R.D. at 478.

I obtained the data from Tick Data, LLC. *See* Tick Data US Equity Trade, Quote & One-Minute Data File Format Document Version 3.4.

The "NBBO" is the National Best Bid and Offer ("NBBO") as calculated by Tick Data, LLC. Tick Data states: "NBBO files are derived from Quote data. The quotes in NBBO files represent the best bid and best offer across all US exchanges at any given time." See Tick Data US Equity Trade, Quote & One-Minute Data File Format Document Version 3.4, p. 15. "Tick Data, LLC now offers a quote dataset that contains only the National Best Bids & Offers (NBBO) for U.S. Equities. The NBBO for USA Equities dataset is built from our USA Equities data, and includes the best (lowest) available offer prices and the best (highest) available bid prices across all U.S. exchanges for listed equities going back to January 2004. While it is commonly believed that the NBBO file provided by the Consolidated Tape Association (CTA) is the actual NBBO, this file contains only a part of the data and information required to calculate the true NBBO. After extensive research, Tick Data has developed dataset that is representative the complete of NBBO." (https://www.tickdata.com/product/nbbo/, last accessed May 2, 2017).

I removed any quotes where the bid quote, ask quote, bid size, or ask size was less than or equal to zero, or the ask quote was less than or equal to the bid quote. This filtering process removed 12,038 observations.

each quote was prevailing was also calculated.⁸⁶ The time-weighted average spread each day was then calculated using the number of milliseconds each quote prevailed during that day as the weight for that quote. **Exhibit VI** contains the results of the bid-ask spread analysis for each of the 244 days of the Class Period. The average daily percent spread for CommVault common stock was 0.15%, and the median was 0.13%.

- 60. These results compare favorably to the findings of courts in other matters where the courts concluded that the common stocks traded in efficient markets.⁸⁷ Further, they also compare favorably to recent academic research that showed average bid-ask spreads based on monthly and yearly data of 2.55% and 2.91%, respectively for NASDAQ common stocks in 2009.⁸⁸
- 61. The narrow bid-ask spread further supports the conclusion that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.

4. Other Operational Factors

62. In addition to the *Cammer* and *Krogman* factors, some courts have also considered whether there is a relatively large proportion of institutional holdings of the

⁸⁶ If more than one quote occurred within a millisecond, the last quote in the order the data were obtained was considered the prevailing quote for that millisecond. In addition, the final quote for the day was excluded from the analysis. The analysis was performed over 3,473,815 quotes.

See Nguyen v. Radient Pharms. Corp., 287 F.R.D. at 574 (C.D. Cal. 2012) (finding that a bidask spread of 0.58 percent supported market efficiency); In re Scientific-Atlanta, 571 F. Supp. 2d 1315, 1339 (N.D. Ga. 2007) (finding that a bid-ask spread that "never exceeded 1.9%" weighed heavily in favor of market efficiency); and Cheney v. Cyberguard Corp., 213 F.R.D. 484, 501 (S.D. Fla. 2003) (finding that average daily relative bid-ask spread of 2.44% weighed in favor of market efficiency).

⁸⁸ Kee H. Chung & Hao Zhang, *A Simple Approximation of Intraday Spreads Using Daily Data*, 17 J. Fin. Markets, 94, Table 2 (2014). The paper compared data using closing CRSP (Center for Research in Security Prices) prices to intraday data and showed the spreads are very close. 2009 is the most recent year the authors examined.

common stock,⁸⁹ and whether there are opportunities for arbitrage, including the availability of shares to borrow to enter into short sales.⁹⁰

63. **Exhibit VII** lists 370 institutions that filed SEC Form 13F and other documents, disclosing the combined sizes of their beneficial and non-beneficial ownership positions of CommVault common stock during the Class Period. This set of institutional investors and investment advisors, which participated in the market for CommVault common stock either on their own behalf or on behalf of other beneficial owners, suggests that a large group of sophisticated investors were participating in the market. Further, the institutions that owned the 20 largest positions in CommVault common stock as of June 30, 2013, September 30, 2013, December 31, 2013, or March 31, 2014, held a large proportion of the total public float on each of those dates. *See* **Exhibit VIII** (which also reports the position relative to outstanding shares). This exhibit shows that the aggregate positions of these 28 institutions were between 72% and 86% of

⁸⁹ Enron, 529 F. Supp. 2d at 756.

⁹⁰ *PolyMedica*, 453 F. Supp. 2d at 273.

For securities traded on major U.S. exchanges, such as the NASDAQ, S&P Capital IQ gathers institutional ownership information from Form 13F filings and other sources. For 13F filings, the SEC's rules state: "Institutional investment managers that use the United States mail (or other means or instrumentality of interstate commerce) in the course of their business and that exercise investment discretion over \$100 million or more in Section 13(f) securities must file Form 13F. . . . An institutional investment manager is an entity that either invests in, or buys and sells, securities for its own account. For example, banks, insurance companies, and broker/dealers are institutional investment managers. So are corporations and pension funds that manage their own investment portfolios. An institutional investment manager is also a natural person or an entity that exercises investment discretion over the account of any other natural person or entity. For example, an investment adviser that manages private accounts, mutual fund assets, or pension plan assets is an institutional investment manager. So is the trust department of a bank. A trustee is an institutional investment manager, but a natural person who exercises investment discretion over his or her own account is not an institutional investment manager." U.S. Securities and Exchange Commission: Division of Investment Management: Frequently Asked Questions About Form 13F, March 15, 2017, http://www.sec.gov/divisions/investment/13ffaq.htm (last visited April 18, 2017).

the public float (and between 67% and 80% of the outstanding shares) as of the listed dates. 92

64. The relatively large number of shares and relatively large proportion of the float composed of the positions of sophisticated institutional investors and investment advisors further support the conclusion that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.⁹³

5. Arbitrage Opportunities and Short Interest

- 65. Short selling enables market participants to trade on their negative views about a company even if they do not hold a long position in its stock. Thus, short selling assists in arbitrage activity when it is believed by investors that the stock might decline in value over time. Short selling can therefore affect market prices and efficiency because it enables traders who believe the price is going to decline, even if they do not hold a long position, to sell and possibly affect market prices.
- 66. The amount of short interest in CommVault common stock during the Class Period (encompassing short interest reported from April 30, 2013 through April 30, 2014) ranged from 1.50 million shares to 7.33 million shares, with an average short interest of 3.04 million shares. As a percentage of shares outstanding, short interest ranged from 3.2% to 15.6% and, as a percentage of public float (also including short interest), short interest ranged from 3.3% to 14.2%. *See* Exhibit IX. This wide range of short interest suggests that arbitrageurs and traders with negative views on CommVault were able to trade actively. The fact that there was arbitrage and trading activity supports the conclusion that CommVault common stock traded in an open, well-developed and efficient market.

Hundreds of additional institutional investors and investment advisors made up the remaining 28% and 14% of the float, respectively, that is not accounted for by the institutional investors and investment advisors listed in **Exhibit VIII**.

⁹³ See note 25. Other courts have noted the level of institutional investors in assessing market efficiency. See, e.g., In re Alstom SA Sec. Litig., 253 F.R.D. 266, 280 (S.D.N.Y. 2008); City of Ann Arbor Emps' Ret. Sys. v. Sonoco Prods. Co., 270 F.R.D. 247, 251 (S.D.Cal. 2010); Billhofer v. Flamel Techs., S.A., 281 F.R.D. 150, 153 (S.D.N.Y. 2012).

a) Put-Call Parity⁹⁴

- 67. In addition to trading "naked" long and short positions in the common stock directly, arbitrageurs can also profit from any perceived mispricing of the common stock by trading in call and put options on the common stock.⁹⁵ In an efficient market, the various call and put options on a common stock will be priced relative to one another (and the common stock) so as to provide zero economic profits from arbitraging these securities against one another.⁹⁶ Economists refer to this no-arbitrage state as "put-call parity."
- 68. Put-call parity is a theoretical relation between call option prices, put option prices and stock prices that should hold because a portfolio of put and call options plus risk-free bonds (accounting for borrowing money to pay for positions or lending the money garnered from the short sale) can be constructed to replicate the payoff from purchasing the underlying common stock. For American-style options on stocks, the put-call parity relation implies a lower and an upper bound on the value of the put and call option prices such that the following condition is satisfied:⁹⁷

$$S - X \le C - P \le S - Xe^{-rt},$$

In a recent case, *In re Groupon, Inc. Securities Litigation*, the court held that "a put-call analysis is simply not required to establish market efficiency under *Basic* and *Halliburton*." 2015 WL 1043321, at *9 n. 6. Nevertheless, I still evaluate the put-call parity conditions together with the operational and price-related factors the courts rely upon. In this analysis, I also find that the evidence supports the conclusion that CommVault common stock traded in an open, developed and efficient market.

A call option gives the holder the right, but not the obligation, to purchase the underlying security at a specific price (the "exercise price") on, or possibly before, a specific date (the "expiration date"). A put option gives the holder the right, but not the obligation, to sell the underlying security at the exercise price on, or possibly before, the expiration date.

⁹⁶ Zero profits is an economic term that means no abnormal returns net of transactions costs.

For example, see John C. Hull, Options, Futures, and Other Derivatives 211 (Pearson Prentice Hall, 7th ed. 2009). CommVault did not pay any dividends on its common stock during the Class Period and, therefore, an adjustment to put-call parity for dividends is not required here.

where S denotes the current price of the underlying common stock, X denotes the exercise price of the option, C is the call-option price, P is the put-option price, r is the risk-free interest rate, 98 and t is the time to expiration of the options. 99

- 69. When arbitrage or profitable trading strategies exist, this relationship no longer holds and the condition is violated. In other words, persistent violations might suggest the lack of arbitrage activity or artificial restrictions to trading that inhibit the market response to new information. Persistent violations suggest that the common stock does not trade in an open, well-developed or efficient market.
- 70. I conducted an empirical test to determine whether CommVault's common stock and exchange-traded options on CommVault common stock violated this put-call parity condition on each day during the Class Period. For the analysis, I obtained end-of-day bid and ask data for options on CommVault common stock from iVolatility. Using bid and ask quotes for CommVault common stock and options, I created put-call pairs over which to test the put-call parity condition. 101
- 71. I then tested these multiple option pairs along with the stock price to determine if there were violations of the put-call parity condition. Because these bounds are derived from the economic assumption of no arbitrage, it is important to test the

For the risk-free interest rate r in the equation above, I used the U.S. Treasury constant maturity rate closest to the number of days to expiration for each respective option. The interest rate data were obtained from the Federal Reserve Board database. The following cutoffs were used in assigning interest rates to time to maturity: 1-60 days, 1-month rate; 61-136 days, 3- month rate; 137-273 days, 6-month rate; 274-547 days, 1-year rate; 548-912 days, 2-year rate; and over 912 days, 3-year rate. I converted the interest rates to continuous compounding using the formula: $2 \times ln(1+r/2)$, where r is the interest rate based on semiannual compounding.

⁹⁹ For options with expiration dates on Saturday, I set the number of days to expiration as the expiration date less the trading date less one. Otherwise, I set the number of days to expiration as the expiration date less the trading date.

At any given time, there are multiple put and call options that trade based on CommVault's common stock. These put and call options can differ in terms of exercise price and expiration date.

I exclude any observation where the bid price of the stock or option was greater than or equal to its ask price. This removes 39 possible option pairs of data. I use the closing bid and ask on the NASDAQ Global Select for CommVault's common stock obtained from Bloomberg.

condition based on realistic buying and selling opportunities. Therefore, the lower bound of the equation above (i.e., the left-hand term in the equation) is calculated using the ask quote for the call option, the bid quote for the put option and the bid quote for the stock, while the upper bound of the equation (i.e., the right-hand term in the equation) is calculated using the bid quote for the call option, the ask quote for the put option and the ask quote of the stock.

72. The magnitude of the violation in percentage terms was calculated for each option pair in relation to the bid-ask midpoint of CommVault's common stock (S_{bidask}), specifically as the absolute value of:

$$\{\min[0, S_{ask} - (C_{bid} - P_{ask} + Xe^{-rt})] + \max[0, S_{bid} - (C_{ask} - P_{bid} + X)]\} / S_{bidask}.^{102}$$

73. As **Exhibit X** shows, there was only 1 violation out of the 19,369 valid option pairs. Therefore, the de minimis number of violations of the put-call parity condition, or less than 0.01% of the end-of-day quotes, suggests that trading strategies to profit from put, call and stock mispricing were not available throughout the Class Period, thus providing evidence that arbitrageurs could trade and were freely trading in CommVault common stock.¹⁰³ The de minimis number of violations of the put-call parity condition supports the conclusion that CommVault common stock traded in an open, well-developed and efficient market during the Class Period.

D. Conclusion Based on the Operational Factors

74. In summary, the operational factors provide strong evidence that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.

¹⁰² The result was also rounded to the nearest 0.01%.

When there was a violation, the magnitude measured as a percent of the midpoint of stock bid-ask prices was only 0.04%.

VI. THE PRICE-RELATED FACTORS DESCRIBING MARKET EFFICIENCY OF COMMVAULT COMMON STOCK

A. Price Reaction to Unexpected, New, Value-Relevant Information

1. Background

75. What is often referred to as the fifth *Cammer* factor is "a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price." As the *Krogman* court noted, "in an efficient market, a stock's price remains relatively stable in the absence of news, and changes very rapidly as the market receives new and unexpected information." 105

76. To detect whether the price of CommVault common stock reacted in a reasonable and timely fashion to disclosures of unanticipated information, I ran a series of empirical tests using the results from an event study. Event studies are widely used in academia, litigation matters and investment practices, and have been a standard statistical procedure used by financial economists for over thirty years. They are generally used to measure the reaction of market participants (and thus the security price) to the disclosure of new information. In an event study, commonly utilized statistical methods are used to test whether a stock price movement on a particular date is statistically significant – i.e., is not the product of chance. To determine whether a stock price movement is statistically significant, an economist removes the outside influences on the stock price movement and compares the remaining firm-specific portion of the stock price movement on the date in question to the typical or normal volatility of the Company's stock. This comparison is used to scientifically determine if the firm-specific portion of the stock price movement is anomalous or outside the bounds of what would be expected by chance.

77. To perform an event study, one begins by removing the market- and industry-wide influences on an individual security's price movements. What remains or is isolated from the security's actual price movement is what is generally referred to as the "firm-specific effect." This approach uses a so-called market model regression to

¹⁰⁴ *Cammer*, 711 F. Supp. at 1287.

¹⁰⁵ *Krogman*, 202 F.R.D. at 477.

partition a company's common stock-price movement on each trading day into three or more parts: the movement caused by market-wide influences, or the "market effect"; the movement caused by industry-wide influences, or the "industry effect"; and the movement caused by firm-specific influences, or the "firm-specific effect." As will be described in more detail below, on each day the firm-specific portion of the stock price movement or the "firm-specific effect" is obtained by subtracting the *predicted* stock-price movement for that day (based on the predicted price movement generated using the actual market- and industry-wide factors on that day) from the *actual* stock price movement on that same day. This subtraction yields the excess or "abnormal return" for that day, and represents the residual portion of the return (i.e., the firm-specific portion of the return) that is *not* predicted or explained by market- and industry-wide influences.

- 78. The event study methodology then provides empirical evidence showing whether these firm-specific abnormal returns are outside the bounds of what would be expected by chance or what the economist calls statistically significantly different from zero (hereinafter referred to as "significant returns"). If abnormal returns are outside the bounds of what would be expected by chance, that means the absolute value of the abnormal returns is greater than the level that would be expected if the returns were generated by a random process.
- 79. The specification of the regression model for an event study includes certain explanatory variables i.e., the variables that explain the variation in the daily returns to the common stock. The event study will, at a minimum, include an explanatory variable describing general market returns. There are many different acceptable specifications, and I have chosen to use a widely used market model regression specification that includes as explanatory variables the general market returns and the returns to an industry index. This specification can be written as:

$$R_t = \alpha + \beta_1(Rm_t) + \beta_2(INDUSTRY_t) + e_t.^{106}$$

This equation is a time-series where the variables are measured at comparable times. In this case, the time interval is at the daily close of trading.

- 80. In this equation, R_t is the daily return to the common stock, Rm_t is a proxy for the daily market return and INDUSTRY_t is a proxy for the daily industry return, while α and β represent the intercept coefficient or constant term and other regression coefficients and e_t represents an estimation error for each date. As explained below in paragraph 87, in the market model regression, "dummy variables" are often included to account and adjust for atypical variation in the daily returns to the common stock that result from the disclosures during the Control Period of significant firm-related information.
- 81. Once the appropriate specification is selected, econometric regression methods are used to estimate the parameters or coefficients in the equation above, namely α , β_l , and β_2 , during the Control Period. Data from a period immediately prior to the date when the firm-specific abnormal return is to be examined is generally used as the Control (or estimation) Period, as it is here with the use of rolling regressions (described below). The second step uses the estimated coefficients, namely α , β_l , and β_2 , and multiplies them by the actual observed daily return measures for their respective explanatory variables on the date or dates (if a multiple-day event window is used) immediately following the end of the Control Period. On each day during the class period, the products of these multiplications are summed to calculate the predicted daily return. On each date, the *abnormal return* (also referred to as the excess return or residual) is calculated by subtracting the predicted daily return from the actual daily return.
- 82. In the third step, to determine if the abnormal return on that date is outside the bounds of what would be expected by chance, a statistical test called the t-test is employed to assess the statistical significance of the abnormal return for each date. The

A dummy variable is an additional explanatory variable that takes on the value of 1 on the date indicated and 0 for all other dates. In econometric time-series analysis, dummy variables are often used to indicate a non-recurring event that is unique, unusual or anomalous, such as a specific earnings announcement.

[&]quot;There are <u>essentially four choices for the estimation period</u>: before the event window, during the window, after the window, and around the window. <u>The majority of events studies use an estimation period before the event</u>." Glenn V. Henderson, Jr., *Problems and Solutions in Conducting Event Studies*, 57 Jnl. of Risk and Ins. 282, 291 (June 1990) (emphasis added).

t-test is based on a t-statistic, which is calculated by taking the estimated abnormal return and dividing it by the estimated square root of the variance of the abnormal price movements during the Control Period. The estimated square root of the variance is called the standard error of the regression. The standard error is estimated from the regression and is supposed to represent the typical or normal volatility of the unexplained or residual price movements of the common stock. This statistical test is used to determine whether the abnormal return is outside the bounds of what would be expected by chance; or, in other words, whether it is significantly different from zero with a specified degree of certainty, where the degree of certainty is equal to one minus the p-value or probability of observing an abnormal return calculated from the market model regression that is equal to or greater than a specified number based on statistics. Here, I use the generally accepted benchmark in academic publications of a 5% significance level. This means that when the abnormal return is statistically significant, I can conclude that the abnormal return is outside the bounds of what would be expected by chance, with 95% confidence.

83. Finally, in the typical event study performed in the context of class certification, there is an examination of the relationship between the abnormal returns, the statistical significance of those abnormal returns, and news related to the subject company. Below, I examine these relationships for CommVault common stock using three types of empirical analyses.

2. Event Study for CommVault Common Stock

84. To implement the event study related specifically to CommVault common stock, I adjust the daily percentage returns on CommVault common stock to eliminate market-wide and industry-wide influences by performing a regression using the market model described above. In this market model regression, the daily percentage return of CommVault common stock is the dependent variable. The independent variables are the NASDAQ Composite Total Return Index (represented by Rmt; Bloomberg identifier "XCMP") and the S&P 400 Software Industry Index (represented by INDUSTRYt;

Bloomberg identifier "S4SOFT").¹⁰⁹ The industry index is measured net of market.¹¹⁰ **Exhibit XI** contains the members of the industry index at the start and end of the Class Period and at the end of 2013.

- 85. For each trading day of the Class Period, as well as for two extra days, namely May 6, 2013 (the date before the beginning of the Class Period) and April 25, 2014 (the date following the date of the final corrective disclosure), I use a rolling period of 120 trading days before each date, to estimate a separate set of parameters (namely α , β_1 , and β_2) used to calculate the abnormal return and the standard error for that date. Therefore, I have run 246 separate market model regressions using 246 Control Periods, with each Control Period ending on the trading date immediately prior to the date for which I calculate the abnormal return.
- 86. Consistent with the market model regression specification I used to support my evaluation of whether DFC Global Corp ("DFC") common stock traded in an open, well-developed and efficient market,¹¹¹ along with the two return indexes specified in the market model regression above I use dummy variables on six dates, including January 30,

The S&P 400 Software Industry Index comprises stocks in the S&P 400 Midcap Index that are classified in the Global Industry Classification Standard (GICS) Level 3. The S&P Select Industry Indices are designed to measure the performance of narrow GICS sub-industries or groups of sub-industries. At the start and end of the Class Period, this index had 18 and 19 members, respectively. CommVault was a member of this index starting on February 14, 2013. I removed the impact of CommVault's daily stock price movements from the changes in the daily value of the industry index. I removed CommVault's daily return based on its daily index weight (source: Bloomberg), where the daily industry return on date t is equal to: Return of the S4SOFT on date t minus the product of CommVault's weight on date t-1 times CommVault's daily return on date t, all divided by one minus CommVault's weight on date t-1. For this procedure, I use CommVault's daily return calculated based on NASDAQ Global Select closing prices (Bloomberg identifier CVLT UW).

I net the market return from the industry return to minimize a statistical property referred to as multicollinearity. To net the market return, I regress the industry return on the market return and use the obtained residual return (i.e., the industry return netting out market effects) as the industry return in my market models for CommVault.

W. Palm Beach Police Pension Fund v. DFC Global Corp., 2016 WL 4138613, at *13 (E.D. Pa. Aug. 4, 2016) (finding that "Dr. Hartzmark's report includes data to support the conclusion that abnormal returns were experienced on dates that included corrective disclosures. . . . Dr. Hartzmark has data underlying his conclusions and Dr. Marcus just has noise.").

2013, May 7, 2013, July 30, 2013, October 29, 2013, January 29, 2014 and April 25, 2014.¹¹² (*See* Exhibit XII). These dates all include disclosures by CommVault management of the Company's prior quarterly (or annual) earnings.¹¹³

87. I include a dummy variable when there is a release of important or significant firm-related information, because should that single date have a large abnormal return caused not by chance, but by the disclosure of firm-related information, it would then be used for the subsequent 120 days to estimate 120 sets of regression parameters, 120 predicted returns, and thus 120 abnormal returns and 120 standard errors. Therefore, if there is a large abnormal return caused by the release of unexpected firmrelated material information, which is obviously not a random event, its influence on the CommVault common stock price movement must be accounted for. If it is not accounted for via a dummy variable, this non-random influence might contaminate the estimation process during the Control Period and induce a distortion or bias in the parameter estimates, predicted returns and thus the abnormal returns and standard errors for all 120 subsequent days. Using dummy variables to control for the price impact of potentially important non-random or atypical informational disclosures in each of the 246¹¹⁴ different regression Control Periods, results in regression model coefficients that more precisely reflect the normal or typical return relationship between CommVault and the market and industry indexes, and thus improves the estimated parameters, predicted returns and abnormal returns. This is a widely used and generally accepted econometric

I included one dummy variable before the start of the Class Period because it is in the estimation period for the early dates of the Class Period. I determined the precise time of the dissemination of the releases by examining the time-stamps on the press releases from PR Newswire (U.S.) stories available on Bloomberg or Factiva, and the time stamps for CommVault SEC Form 8-Ks from the SEC website. When the information was released after the market closed, the trading day following the disclosure date was used as the price impact or dummy variable date.

Because I use 120-day rolling regressions, no individual Control Period includes more than two dummy variables.

One for each day of the 244-day Class Period, one for April 25, 2014 and one for May 6, 2013 (for the purposes of the statistical test of autocorrelation discussed below). Because I use rolling regressions, the regression estimation period for the first of the 246 rolling regressions begins 121 trading days prior to the start of the Class Period.

methodology in the academic finance literature.¹¹⁵ For example, Professor Carol Alexander suggests that "one might consider creating a dummy [variable] to model the timing of important news announcements... [or] whenever the data period covers ... a temporary shift due to an extreme market movement."¹¹⁶ She adds, "If dummies are omitted there will be residual problems that lead to inefficient parameter estimates on the

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G. E. P. Box & G. C. Tiao, *Intervention Analysis with Applications to Economic and Environmental Problems*, 70 J. Am. Stat. Assn., 70, 71 (1975); ("In general, the individual e_{tj} could be exogenous time series whose influence needs to be taken into account. For the present purpose, however, some or all of them will be indicator variables taking the values 0 and 1 to denote the nonoccurrence and occurrence of intervention.")

David F. Larcker, Lawrence A. Gordon & George E. Pinches, *Testing for Market Efficiency:* A Comparison of the Cumulative Average Residual Methodology and Intervention Analysis, 15 J. Fin. & Quant. Analysis 267, 272 (1980) ("Financial announcements may be viewed as an intervention where the term intervention refers to an event occurring between the beginning and end of some time series. Box and Tiao have developed a general class of stochastic models which incorporate the possibility of a change in the process due to interventions.")

Paul H. Malatesta, *Measuring Abnormal Performance: The Event Parameter Approach Using Joint Generalized Least Squares*, 21 J. Fin. & Quant. Analysis, 27, 27-28 (1986) ("The system of equations explicitly conditions the return-generating process on the occurrence or nonoccurrence of an event. This is accomplished by appending zero-one dummy variables to market model equations. The variable is set equal to one if an event occurred, and set equal to zero if not. The coefficients multiplying the event dummy variables, the 'event parameters,' measure the event's impact on stock returns.")

Nihat Aktas, Eric de Bodt, & Jean-Gabriel Cousin, Event Studies with a Contaminated Estimation Period, 13 J. Corp. Fin. 129, 129 (2007) ("In this study, we propose a test that reduces the impact of potentially unrelated events during the estimation period. Our proposition is based on a two-state version of the classical market model as a returngenerating process. We present standard specification and power analyses. The results highlight the importance of explicitly controlling for unrelated events occurring during the estimation window, especially in the presence of event-induced increase in return volatility.")

Ekkehart Boehmer, Jim Masumeci, & Annette B. Poulsen. *Event-study methodology under conditions of event-induced variance*, 30 J. Fin. Econ. 253, 254 (1991). ("While we do not discuss the cause of event-induced variance in this paper, we show that it is necessary to control for variance changes to obtain appropriate tests of the null hypothesis that the average abnormal return is zero.")

Carol Alexander, Market Models: A Guide to Financial Data Analysis 440 (John Wiley & Sons Ltd 2001). Carol Alexander is a Professor of Finance at the University of Sussex and Managing Editor of the Journal of Banking and Finance.

real explanatory variables."¹¹⁷ It is also consistent with methods courts have relied upon to certify securities classes.¹¹⁸

88. Using the specifications of the market model above, and a rolling period of 120 trading days prior to each date as the Control Period, I estimated a separate set of parameters for each trading day of the Class Period, May 6, 2013 and April 25, 2014. The regression results for the Class Period and the corrective disclosure date of April 25, 2014 are summarized in **Exhibit XIII**. For the 245 regressions I ran over the Class Period (and the corrective disclosure day of April 25, 2014), the coefficients explaining the variation in the returns of CommVault common stock range from 1.26 to 1.86 for β_1 , and range from 0.80 to 1.54 for β_2 . The 245 adjusted R-squared measures range from 0.31 to 0.57. The average adjusted R-squared measure is approximately 47%.

89. I then used the statistics from each of the 245 regressions to determine whether the abnormal daily return for CommVault common stock on each of the 245 dates was outside the bounds of what would be expected by chance. When the abnormal daily return is outside the bounds of what would be expected by chance, it is considered for that date to be non-zero and to have an abnormal return that is statistically different from zero at the 5% significance level. I have identified 16 days when there were statistically significant returns (i.e., p-values are less than or equal to 5%). These dates are designated as to whether they are statistically significant with either one or two asterisks in **Appendix G** depending on whether the p-values are less than 5% (one asterisk) or 1% (two asterisks). In other words, when I can say with 95% (99%)

¹¹⁷ Carol Alexander, *Market Models: A Guide to Financial Data Analysis* 441 (John Wiley & Sons Ltd 2001).

For example, see In re Groupon, Inc. Sec. Litig., 2015 WL 1043321, at *5: "Dr. Feinstein explained that dummy variables are widely used during a control period to extract atypical days. Consistent with other experts, he used dummy variables to control for potentially abnormal returns related to earnings announcements. Accordingly, he used dummy variables during the control period for all earnings-related trading dates, including the event days. He also used a dummy variable for May 14, 2012, because it was not only an unusual trading day, but also because it was contemporaneously described as atypical by the news media." (Citations omitted.)

confidence the abnormal return is outside the bounds of what would be expected by chance, there is one (a double) asterisk.

90. In **Appendix** C, I present the daily chronology including CommVault common stock prices, returns, volumes, abnormal returns and levels of statistical significance along with any company news. This chronology also demonstrates the extent of the media coverage of CommVault. 119,120

3. Cause-and-Effect Analysis Examining Important News Dates

91. In **Exhibit XIV**, I present empirical information related to the abnormal returns on the five dates used as dummy variables during the Class Period, which also include the two dates when the Complaint alleges there were corrective disclosures.

During the Class Period, numerous news stories about CommVault appeared in leading financial publications, including Associated Press Newswires, Bloomberg First Word; Bloomberg News, Dow Jones Institutional News, *Investor's Business Daily*, and Reuters Significant Developments. The broad dissemination of information about CommVault though the media, analyst reports and regular SEC filings supports the conclusion that CommVault common stock traded in an open, developed and efficient market during the Class Period. *See*, *e.g.*, *In re HealthSouth Corp. Sec. Litig.*, 261 F.R.D. 616, 635 (N.D. Ala. 2009): "The extensive coverage of HealthSouth in general and its bonds in particular by investment professionals, public media, and institutional investors reflects that HealthSouth notes traded in an efficient market."

For the CommVault chronology, I compiled lists of SEC filings, analyst reports, and news articles. I compiled the list of all of CommVault's SEC filings from May 1, 2013 to April 30, 2014 from the SEC website. The list of analyst reports is based on reports available from the Thomson One, Thomson Reuters Knowledge and Capital IQ electronic databases in addition to reports provided by counsel. For Capital IQ, I searched for reports on "Commvault Systems, Inc." between 4/25/2013 and 5/6/2014 with the "Primary symbol only" option on. For Thomson One, I searched for reports on "Commvault Systems, Inc." between 4/25/2013 and 5/6/2014. For Thomson Reuters Knowledge, I searched for reports on "Commvault Systems, Inc." between 4/25/2013 and 5/6/2014 with the "Primary Ticker Only" option on. This is not necessarily a comprehensive list of all analyst reports issued on CommVault. For news articles, I searched Bloomberg and Factiva. For Bloomberg, I used the ticker symbol "CVLT US" and searched for all sources with "medium" relevance excluding Internet-linked headlines, Bloomberg Social Velocity Alerts, Company Filings, Edgar SEC - Online, Bloomberg Transcripts, Twitter, Needham, and Bloomberg Intelligence. For Factiva, I searched all sources for the company code for "CommVault Systems Inc" from 5/1/2013 to 4/30/2014. To eliminate duplicate stories for each of the news providers (Bloomberg and Factiva), a news story was considered a duplicate and eliminated if it had exactly the same date, timestamp, headline, news source, and lead paragraph as another news story from the same provider.

These corrective disclosures are alleged to have caused decreases in the price of CommVault common stock on January 29, 2014 and April 25, 2014. 121

92. Three of the five dates, including both of the days with potential impacts from the corrective disclosures, have rapid price responses. Both of the corrective disclosure days have negative abnormal returns that are highly statistically significant (both with p-values at or below 1%, which corresponds to a confidence level above 99%).

4. Cause-and-Effect Analysis Examining Days with News versus Days without News – Background 122

93. In an efficient market, one expects that there will be some random, large price movements with no news, and conversely, it is expected in an efficient market that there will be news without large price movements. In securities litigation, the event study described above inevitably examines the impact on the security price of a confluence of different types of information that is disseminated. It is not unusual that over a class period the corporation will announce earnings, dividends, discoveries, new products, management changes, new issues, lawsuits it files, lawsuits filed against it, projections, regulatory changes that impact its business, and more. In an efficient market, each unanticipated material piece of information will be expected to have an impact on the security price. Further, if the company's business as reflected in its earnings is predictable (or possibly engineered to be predictable or possibly unchanging because bad news is omitted), then earnings announcements (other than the corrective disclosure) will be anticipated by investors. Thus, for example, in an efficient market, there are many instances when it is expected that there will be no relationship between earnings announcements and price reactions. This is why the *Cammer* court concluded, "Finally, it would be helpful to a plaintiff seeking to allege an efficient market to allege empirical facts showing a cause and effect relationship between unexpected corporate events or

¹²¹ Complaint ¶¶257, 265.

A more in-depth discussion of the topics, techniques and issues in this and the following subsection can be found in Michael L. Hartzmark & H. Nejat Seyhun, *The Curious Incident of the Dog that Didn't Bark and Establishing Cause-and-Effect in Class Action Securities Litigation*, 6 Va. L. & Bus. Rev. 415 (2012).

<u>financial releases</u> and an immediate response in the stock price. This, after all, is the essence of an efficient market and the foundation for the fraud on the market theory."¹²³

- 94. Furthermore, there are unobserved factors that might lead to significant price movements without news. These factors include, among others, unobserved changes in the market's expectations, imperfections in the statistical methods employed to evaluate systematic cause-and-effect relationships, and private trading activity—for example, insider trading or portfolio rebalancing. These all might drive a large price response without an observed cause.
- 95. Therefore, in addition to the examination above of the general relationship between the price reactions associated with the dates used as dummy variables above, I examine the relationship between disclosures and price reactions for all the dates in the Class Period.
- 96. All the dates within the Class Period (plus April 25, 2014, the price impact date from the final corrective disclosure) can be categorized based on the observed relationships between the statistical significance or insignificance of the abnormal returns and whether they are news dates or not. The four categories, as shown below, include:
 - (1) No news and no statistically significant abnormal return;
 - (2) Unexpected news and statistically significant abnormal return;
 - (3) No news and statistically significant abnormal return; and
 - (4) Unexpected news and no statistically significant abnormal return.

OBSERVATION ON A DATE	No News	News
No Statistically Significant Abnormal Return	Efficient Market	Inefficient Market (?)
Statistically Significant Abnormal Return	Inefficient Market (?)	Efficient Market

97. One will find that on most dates, the observed relationship is that of no news and no statistically significant abnormal return, which is consistent with market efficiency and supports the fifth *Cammer* factor. On fewer dates, one will find a

¹²³ Cammer, 711 F. Supp. at 1287 (emphasis added).

statistically significant abnormal return and news, a finding that is also consistent with market efficiency and supports the fifth *Cammer* factor. It is in the other two categories above with the question marks ("?") where there is potential disagreement as to whether the security trades in an efficient market. Thus, the following two questions emerge:

- (1) If there is a significant return, but no news, is this evidence that the security trades in an inefficient market?
- (2) If there is news, but no significant return, is this evidence that the security trades in an inefficient market?

98. To show that for CommVault the answers to these questions are "No," I implement a statistical test utilizing all information about CommVault news and significant returns throughout the Class Period to populate the cells indicated in the table above. I use this statistical test to determine whether there is empirical support for the conclusion that CommVault common stock traded in an efficient market.

5. Cause-and-Effect Analysis Examining Days with News versus Days Without News – CommVault

99. Using a statistical approach, I calculate the number and percentage of days based on news releases (which in this case are the same dates as used for the dummy variables) and the abnormal returns derived from the regression results in **Exhibit XIII**. I then employ a scientific method to establish a lower bound number (or percentage) of observed days with significant returns that would be expected to be observed if there is no relationship between news and abnormal returns (i.e., expected simply by chance).

100. As discussed above when selecting the dummy variables, I have determined that out of the 245 days in the Class Period and the day immediately following (April 25, 2014) there were 5 days with news where there *could have been* although not necessarily *would have been* announcements of unanticipated, material news. Therefore, out of the 245-day Class Period (including April 25, 2014), approximately 2% (=5/245) of the days have such news releases. In **Appendix G**, I identified the 16 dates with statistically significant abnormal returns based on the event study I conducted. Therefore, 6.5%

The five news dates are listed in **Exhibit XII**.

(=16/245) of the days have statistically significant abnormal returns. The information is summarized in **Exhibit XV**, which shows that out of the 245 days in the Class Period (including the corrective disclosure date of April 25, 2014), there were 3 (out of 5) days with significant returns and news, 13 (out of 240) days with significant returns and no news, 2 (out of 5) days with insignificant returns and news, and 227 (out of 240) days with insignificant returns and no news.

101. To begin the analysis, I estimate the statistical properties of the cause-and-effect relationship between stock returns and news in a hypothetical world where I assume there is no link between price reactions and news. In other words, I assume that CommVault daily stock prices do not reflect full information and that significant returns are not associated with the disclosure of information. It then logically follows that if this hypothetical world is descriptive of the actual CommVault world, then we expect there to be no relationship between significant returns and CommVault news. Therefore, I would expect to observe that: (a) CommVault daily returns are determined arbitrarily or in a random fashion, and (b) there will be no link between news and significant returns. In other words, CommVault news and significant returns are randomly distributed.

102. To test whether this hypothesis is a reasonable description of the actual world, I use a statistical method employing a generally accepted approach called "bootstrap testing." Using this method, I have created test statistics to determine whether the observed relationships between CommVault significant returns and news are likely to have been generated in a random fashion. If news is not linked to significant returns, then I would not expect there to be a statistically significant relationship that distinguishes those days when there is or is not news from those days when there are or are not significant returns. In other words, there would be no cause-and-effect correlation because the distributions of significant returns and news are both random events.

This "bootstrap testing" analysis is much like running any type of game of chance, and is similar to the type of process used by state lotteries with multicolored balls to determine the odds of winning and the payouts. The calculations can also be completed using other statistical tests. I find this example easiest to explain and understand. *See* Bradley Efron & Robert J. Tibshirani, *An Introduction to the Bootstrap* 1 (CRC Press LLC, 2d ed. 1998) ("The bootstrap is a recently developed technique for making certain kinds of statistical inferences.").

103. This method utilizes traditional principles of statistical inference, as well as information about trading activity, abnormal returns, and disclosures throughout the Class Period. To determine whether 3 days with significant returns and news is a number above or below the number of days that would be observed if the relationship between news and significant returns were random, I calculate the number of days based on a game of chance to establish a randomness benchmark. In this game, I perform a computer simulation that takes two urns and fills each of them with a total of 245 maize and navy balls (these represent the 245 days in the Class Period, including the corrective disclosure date of April 25, 2014). In the "News Urn" I have 5 navy balls (representing the 5 days when there is news) and 240 maize balls (representing the 240 days when there is no news). In the "Abnormal Return Urn" I have 16 navy balls (representing the 16 days when there are significant returns) and 229 maize balls (representing the 229 days when there are insignificant returns). I then simultaneously draw a ball from each of the two urns 245 times and count the number of times when navy balls are simultaneously drawn from both of the urns (representing the days when there is both a significant return and news).¹²⁶ After I draw all 245 balls from each urn and count the number of times I simultaneously pull navy balls from the two urns, I replace all 245 of the balls in each urn, mix everything up, and go through this process again; repeating it 100,000 times.

104. Using this bootstrap method (i.e., drawing the 245 navy and maize balls 100,000 times) I am able to calculate the likelihood of observing 3 or more of 245 days when the navy balls are pulled at the same time (representing days when there are both significant returns and news) or a 1.2% (=3/245) rate of matching, which is what I observe based on the results of the market model.

105. The results generated from this probabilistic model or game related to the CommVault matter demonstrate that if one puts forth the "null" hypothesis that news and significant returns are unrelated (i.e., a randomness benchmark), there is literally a 0.22% likelihood of observing 3 or more draws (or days) when navy balls are simultaneously drawn from each urn (i.e., less than a 99% likelihood of observing a rate of matching a

¹²⁶ I also calculate the expected numbers in the three other cells.

significant return with news that is equal to or greater than 1.2%). Thus, using traditional statistical confidence levels, I can say that there is more than a 99% likelihood that CommVault news and large price movements of CommVault stock during the Class Period were related and not generated by some random relationship.

106. An alternative approach for testing whether there was a statistically significant difference between the observed proportions of abnormal returns on days with news relative to days without news shows there is a significant difference. On 13 of 240 days (or 5.4%) with no news the abnormal returns are significant, while on 3 of 5 days (or 60%) with news the abnormal returns are significant. These percentages differ by approximately 11 times, and from a statistical point of view, there is over a 99% likelihood that these two measures differ by a statistically significant percentage. Thus, this measurement also provides support for the robustness of the test I discuss above in paragraph 105.

107. Finally, I examine the results generated from this probabilistic model and ask what number and percentage of days I would have expected to find matching if there were support for the "null" hypothesis that news and significant returns were unrelated. If the process were random, I would expect to observe only 0.33 out of 245 draws (days) when navy balls are simultaneously drawn from both urns (i.e., approximately 2% of the total 16 days with significant returns associated with an identifiable news event). These expected 0.33 days are well below the 3 days I observe, representing only 11% of the 3 days I actually observe.

108. Overall, I have demonstrated that empirical evidence of the relationship between CommVault common stock returns on days with news versus days with no news supports the conclusion that CommVault common stock traded in an open, well-developed and efficient market throughout the Class Period.

6. Cause-and-Effect Analysis Examining Autocorrelation

109. Finally, I conducted a statistical test to determine whether the daily abnormal returns of CommVault common stock exhibit persistent and systematic

autocorrelation using returns and lagged returns.¹²⁷ Autocorrelation is a statistical property of the series of returns of a security wherein tomorrow's security price movement can be systematically predicted with a reasonable degree of statistical certainty based solely on the security price movement today (or at some period in the past). The presence of persistent and systematic autocorrelation suggests the possibility that investors might have unexploited profit opportunities from naïve trading strategies (i.e., either buying and holding the security or shorting and holding the short position) that are greater than the transaction costs. Persistent and statistically significant autocorrelation measures the empirical relation between stock returns over consecutive days (e.g., the return today will enable an investor to predict the return tomorrow). Some have argued that persistent and significant autocorrelation in the returns might indicate a violation of market efficiency in that it suggests that the security price does not react quickly, making available profit opportunities from naïve trading strategies that are sustained over time.

110. My statistical analysis of CommVault abnormal stock returns for the 244 days of the Class Period (excluding the corrective disclosure date of April 25, 2014) shows that there is no statistically significant autocorrelation. I ran a standard statistical model by regressing each trading day's abnormal return on the abnormal return from the prior trading day. From this model, I estimate a coefficient of -0.02 representing the measurement of the relationship between the abnormal current (i.e., today) and lagged (i.e., yesterday) returns and a t-statistic of -0.31, which is below the 1.96 level commonly used to demonstrate whether there is a statistically significant relationship between

to include May 7, 2013 in the sample.

predict with some level of certainty the return today, there exists autocorrelation. See

[&]quot;Autocorrelation is usually found in time-series data. Economic time series often display a 'memory' in that variation is not independent from one period to the next." Greene, *supra* note 29. In other words, autocorrelation is the measurement of the relationship between the security return at time t and the return of the same security at some fixed time in the past. First-order autocorrelation would be found when there is a statistically significant relationship between the common stock return today and the common stock return yesterday. Another way of looking at this concept is that if an observer can use the return from yesterday to

Lehocky, 220 F.R.D. at 506-507 n.20 (noting that both parties' experts agreed on the helpfulness of autocorrelation); PolyMedica, 453 F. Supp. 2d at 276–78.
 I estimate a market model regression to obtain the abnormal return on May 6, 2013 in order

yesterday's and today's abnormal returns. Thus, I conclude that there is no statistically significant autocorrelation of CommVault abnormal stock returns during the Class Period. *See* Exhibit XVI.

111. In summary, the statistical test I performed shows no statistically significant autocorrelation for CommVault abnormal returns at the five percent level of statistical confidence, which is consistent with the conclusion that CommVault common stock reacts quickly to news and trades in an efficient market.

7. Conclusion Based on Price-Related Factors

112. My analysis in this section shows that the disclosure of material news caused rapid and significant movements in the prices of CommVault common stock. The demonstration of this cause-and-effect relationship between events and subsequent price movements meets the condition for market efficiency stated in the *Cammer* decision, namely that "[o]ne of the most convincing ways to demonstrate [market] efficiency would be to illustrate, over time, a cause and effect relationship between company disclosures and resulting movements in stock price."

VII. ABILITY TO CALCULATE DAMAGES ON A CLASS-WIDE BASIS FOR HOLDERS OF COMMVAULT COMMON STOCK

Act on a Class-wide basis is subject to a common methodology that begins with the same type of event study I have used to evaluate the price-related factors. Using the results of an event study along with firm-specific information, the level of inflation in the price of CommVault common stock caused by Defendants' alleged misstatements and omissions can be calculated based on the price reaction to disclosures revealing the alleged misstatements and omissions. From this, daily levels of inflation can be calculated throughout the Class Period. Finally, these daily levels of inflation along with the actual

¹²⁹ *Cammer*, 711 F. Supp. at 1291.

trading activity of Class Members can be used to calculate individual damages in a fairly mechanical fashion.¹³⁰

114. For example, if Defendants are found to have violated the securities laws during the Class Period through all or some of the dates that the Complaint alleges as corrective disclosures with statistically significant stock price movements, I would use the results from the regression of the market model presented in **Exhibit XIII** to begin to measure the price impact and level of inflation caused by the misstatements and omissions.

115. However, in a loss-causation analysis, before inflation is estimated and damages are calculated, further analysis of the disclosures on those dates would be required to account for the portion, if any, of the price movements that is unrelated to the alleged wrongdoing. For example, if there were multiple types of material disclosures on any or all of the corrective disclosure dates, one would want, for the purposes of calculating inflation, to disaggregate the abnormal price reaction into separate components. This additional analysis would apply to all Class members. This evaluation and separation of the disclosures on the corrective disclosure dates would need to be undertaken, when discovery is completed, to accurately calculate the inflation due to the alleged misstatements and omissions.

116. Once the price impact from the alleged misstatements and omissions is segregated from the total price reaction, I could then measure the stock price inflation due to the alleged wrongdoing for each day during the Class Period. These inflation measures would then be analyzed together with Class members' purchases and sales to calculate damages on a Class-wide basis, which would be a fairly straightforward and formulaic exercise.

117. I have not been asked to calculate Class-wide damages or evaluate loss causation, both of which depend in part on ongoing discovery.

In addition, the 90-day period following the end of the Class Period would also need to be examined. Under the Private Securities Litigation Reform Act of 1995, a plaintiff may not recover more than the difference between the purchase price and the mean trading price of the stock during the 90-day look-back period. 15 U.S.C. § 78u-4(e)(1).

VIII. CONCLUSION

- 118. In this report, I have shown empirical evidence of:
 - (1) The high average weekly turnover of CommVault common stock;
 - (2) The continuous coverage of CommVault by analysts, investment professionals, public press, and financial institutions, along with regular and frequent disclosures by the Company in the form of press releases, teleconference earnings calls and SEC filings;
 - (3) The fact that CommVault was listed on the NASDAQ, and CommVault investors benefited from having numerous market makers;
 - (4) The fact that CommVault was S-3 eligible;
 - (5) The large market capitalization of CommVault common stock;
 - (6) The large public float of CommVault common stock;
 - (7) The narrow bid-ask spread of CommVault common stock;
 - (8) The large proportion of institutional holdings of CommVault common stock;
 - (9) The variable short interest of CommVault common stock, along with the observation that there are virtually no violations of the put-call parity relationship of CommVault common stock and its options;
 - (10) The relationship between CommVault common stock returns on days with material news versus days with no news;
 - (11) The rapid price reaction of CommVault common stock to new material information about CommVault; and
 - (12) The lack of autocorrelation between past and current abnormal returns of CommVault common stock.
- 119. Based on my thorough examination of these price-related and operational factors that describe the market in which CommVault common stock traded during the

Class Period, it is my opinion that the common stock traded in an open, well-developed and efficient market throughout the Class Period.

120. Moreover, it is my opinion that the calculation of damages for violation of Section 10(b) of the Exchange Act is subject to a common methodology for CommVault common stock on a Class-wide basis.

I declare under penalty of perjury that the foregoing is true and correct.

RESPECTFULLY SUBMITTED THIS TWELFTH DAY OF MAY 2017

Michael L. Hartzmark, Ph.D.

APPENDIX A

MICHAEL L. HARTZMARK, PH.D.

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PRESENT POSITIONS

HARTZMARK ECONOMICS LITIGATION PRACTICE, LLC

President (2013 - present)

Specializing in the application of economic, financial and accounting principles to securities, complex commercial, investment, intellectual property, antitrust and automotive litigation and regulatory matters

OFFICE OF THE ATTORNEY GENERAL – STATE OF NEW YORK

Independent Contractor (2013 - present)

OFFICE OF THE ATTORNEY GENERAL – CONFIDENTIAL

Independent Contractor (2015 - present)

MDA FINANCIAL, INC.

President (1981 - present)

FINRA (fka NATIONAL ASSOCIATION OF SECURITY DEALERS) Dispute Resolution Member Arbitrator (2005 - present)

EDUCATION

Ph.D. Department of Economics, the University of Chicago, 1984, (Doctoral Exams in Industrial Organization and Regulation; Public Finance)

M.A. Department of Economics, the University of Chicago, 1982

B.A. The University of Michigan (Economics, High Honors and Phi Beta Kappa), 1978

ACADEMIC HONORS AND FELLOWSHIPS

John M. Olin Faculty Fellowship, (George Stigler, Director) (1986 - 1987)
PEW Teaching Fellow, the University of Chicago (1980 - 1981)
Phi Beta Kappa, the University of Michigan (1978)
Parker Prize, in Labor Economics, University of Michigan (1978) -- Given for the best graduate or undergraduate paper in Labor Economics

GRANTS

Grant from the University of Chicago (1984). Center for the Study of Futures Prices: grant to analyze margin regulation for the Chicago Board of Trade Studies.

PROFESSIONAL EXPERIENCE

CRA INTERNATIONAL, INC.

Independent Contractor (2015)

NAVIGANT ECONOMICS (FORMERLY CHICAGO PARTNERS, LLC)

Academic Affiliate (2012 - 2013)

Principal/Director (2008 - 2012)

Vice President (2004 - 2007)

DARMA, LLC

President (2005 - 2008)

PACIFIC BIOMETRICS, INC.

Interim Chief Financial Officer (2004 - 2006)

CRAGAR INDUSTRIES, INC.

Chairman, CEO, President and Treasurer (1993 - 2004)

MDA FINANCIAL, INC.

President (1981 - present)

FAHNESTOCK & Co., Inc. (now Oppenheimer & Co., Inc.)

Financial Consultant (Series 7 and Series 63) (2001 - 2003)

ECONOHIO CORPORATION

President (1989 - 1992)

LEXECON INC.

Senior Economist (1987 - 1989)

UNIVERSITY OF CHICAGO, Center for the Study of the Economy and the State, and the Graduate School of Business (now the Chicago Booth School of Business)

John M. Olin Visiting Scholar (1986 - 1987)

UNIVERSITY OF MICHIGAN, Joint with Michigan Business School (now the Stephen M.

Ross School of Business) and Department of Economics

Assistant Professor (1984 - 1988)

Lecturer (1984)

COMMODITY FUTURES TRADING COMMISSION, Division of Economics and

Education, Washington, D.C.

Financial Economist (1982 -1983)

UNIVERSITY OF CHICAGO, Department of Economics

Instructor for Economic Analysis (1981)

Research Assistant for A. C. Harberger (1982)

Research Assistant for Sam Peltzman (1981 - 1982)

U. S. DEPARTMENT OF THE TREASURY, Office of Tax Analysis, Washington, D.C.

Research Assistant (1981)

PUBLICATIONS

- "Understanding the Efficiency of the Market for Preferred Stock," (with H. Nejat Seyhun), Virginia Law & Business Review, Volume 8, Number 2, Spring 2014.
- "An Economist's View of Amgen," Law360, May 2, 2013. http://www.law360.com/articles/438303/an-economist-s-view-of-amgen.
- "The Curious Incident of the Dog that Didn't Bark and Establishing Cause-and-Effect in Class Action Securities Litigation," (with H. Nejat Seyhun), <u>Virginia Law & Business Review</u>, Volume 6, Number 3, 2012.
- "Fraud on the Market: Analysis of the Efficiency of the Corporate Bond Market," (with Cindy A. Schipani and H. Nejat Seyhun), <u>Columbia Business Law Review</u>, Number 3, Volume 2011.
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- "Business Valuations for the Personal Lawyer," Law and Fact, September 1991.
- "Is Risk Aversion a Theoretical Diversion?" <u>The Review of Futures Markets</u>, Volume 7, Number 1, 1988.
- "Returns to Individual Traders of Futures: Aggregate Results," <u>Journal of Political Economy</u>, December 1987.
- "Regulating Futures Margin Requirements," <u>Review of Research on Futures Markets</u>, Volume 5, Number 3, 1986.
- "The Effects of Changing Margin Levels on Futures Market Activity, the Composition of Traders in the Market, and Price Performance," Journal of Business, April 1986.
- "Individual Income Taxation, 1947-1979," (with Eugene Steuerle), <u>National Tax Journal</u>, June 1981.

BOARDS

- POWHATAN BUILDING CORPORATION, Director, Treasurer, (2010 present)
- MIDTOWN EDUCATIONAL FOUNDATION, Auxiliary Board Member, (2009 2013)
- GLOBAL ENTERTAINMENT CORPORATION (Formerly AMEX: GEE, currently not listed); Director, Audit Committee Member (2004 2008);
- THE BOARD INSTITUTE (private software company), Financial Advisory Board (2004 2006)
- SHAKER INVESTMENTS, Financial Advisory Board (1992 2005)
- PACIFIC BIOMETRICS, INC. (OTC BB: PBMC currently not listed and renamed as Pacific Biomarkers), Director and Chairman of Audit Committee (2002 2004)
- CRAGAR INDUSTRIES, INC. (Formerly OTC BB: CRGR, company sold); Director and Chairman of the Board (1993 2004)

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- <u>Kathleen Hager as Special Administratrix of the Estate of Kenneth Hager, Deceased v.</u>

 <u>Ortho-McNeil-Janssen Pharmaceuticals, Inc. and Alza Corporation.</u> Circuit Court of Cook County; Deposition (12/17/2013).
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- New Jersey Carpenters Health Fund, et al v. Residential Capital, LLC.

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- <u>Darren and Kim Kasparian v. Draper and Kramer, Inc. Wheaton Center LLC., Wiss, Janney, Elstner Associates, Inc. and Thyssenkrupp Safeway, Inc.</u> Circuit Court of Cook County; Report (4/3/2015); Deposition (7/21/2015).
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 - U.S. District Court for the Eastern District of Pennsylvania; Report (10/2/2015); Deposition (12/14/2015).
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Appendix B Materials Relied Upon

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In re Xcelera.com Sec. Litig., 430 F.3d 503 (1st Cir. 2005).

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Appendix B Materials Relied Upon

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Monness Crespi Hardt: 4/21/2014.

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DATA

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							CommVa	ult News	Chron	ology wit	h Daily Statistics
[1]	[2]	[3]	[4]	[5] Market	[6] Industry Excess	[7]	[8]	[9] Abnormal Price	[10]	[11]	[12]
Date	Volume	Price	Return			Return	Return	React	t-stat	p-Value	Events
5/7/2013 Tue	2,426,280	\$76.33	-1.91%	0.11%	0.39%	0.40%	-2.32%	-\$1.80	-1.36	17.76%	CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											COMMVAULT SYSTEMS INC 8-K (SEC - SEC Edgar, 05/07/2013)
											CommVault Systems, Inc. Patent Issued for System and Method for Automating Customer-Validated Statement of Work for a Data Storage Environment (Information Technology Newsweekly - Factiva, 05/07/2013)
											CommVault Systems, Inc. Patent Issued for System and Method for Providing Encryption in Storage Operations in a Storage Network, Such as for Use by Application Service Providers That Provide Data Storage Services (Information Technology Newsweekly - Factiva, 05/07/2013)
											$\textbf{Craig-Hallum Capital Group Analyst Report} \ (\textbf{Analyst Report - Manual Entry}, 05/07/2013)$
											Credit Suisse Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											Event Brief of Q4 2013 CommVault Earnings Conference Call - Final (CQ FD Disclosure - Factiva, 05/07/2013)
											JMP Securities Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											Lake Street Capital Markets, LLC Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											Lazard Capital Markets Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											Needham & Company Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											New Highs For NYSE Indexes; Whole Foods Up In After Hours (Investor's Business Daily Factiva, $05/07/2013$)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											Raymond James & Associates Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											Sterne Agee & Leach Analyst Report (Analyst Report - Manual Entry, 05/07/2013)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 05/07/2013)

 [1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
				Market	Excess	Predicted	Abnormal	Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events

Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 05/07/2013)

Stocks Build On Q1 Strength; CommVault, MercadoLibre Spike (Investor's Business Daily - Factiva, 05/07/2013)

Stocks Mixed As Nasdaq Wobbles: EOG Resources Bolts Higher (Investor's Business Daily - Factiva, 05/07/2013)

Stocks Rise With Dow, S&P Headed For New Record Highs (Investor's Business Daily - Factiva, 05/07/2013)

William Blair & Company Analyst Report (Analyst Report - Manual Entry, 05/07/2013)

Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 05/07/2013)

U.S. DAYBOOK: Mondelez, Electronic Arts, Whole Foods, NRG Earns (Bloomberg First Word - Bloomberg, 05/07/2013 05:30 AM)

CommVault Announces Fourth Quarter and Fiscal 2013 Financial Results (PR Newswire (U.S.) - Factiva, 05/07/2013 07:40 AM)

*COMMVAULT SYSTEMS 4Q EPS 35C :CVLT US (BLOOMBERG News - Bloomberg, 05/07/2013 07:40 AM)

*COMMVAULT SYSTEMS 4Q NON-GAAP EPS 41C :CVLT US (BLOOMBERG News - Bloomberg, 05/07/2013 07:40 AM)

*COMMVAULT SYSTEMS 4Q REV. \$138.3M :CVLT US (BLOOMBERG News - Bloomberg, 05/07/2013 07:40 AM)

*COMMVAULT SYSTEMS 4Q REV. UP 21% :CVLT US (BLOOMBERG News - Bloomberg, 05/07/2013 07:40 AM)

*COMMVAULT SYSTEMS 4Q SERVICE REV. \$66.1M :CVLT US (BLOOMBERG News - Bloomberg, 05/07/2013 07:40 AM)

*COMMVAULT SYSTEMS 4Q SOFTWARE LICENSES REVENUE \$72.1M :CVLT US (BLOOMBERG News - Bloomberg, 05/07/2013 07:40 AM)

CommVault Announces Fourth Quarter and Fiscal 2013 Financial Results (PR Newswire - Bloomberg, $05/07/2013\ 07:40\ AM$)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
 Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											*COMMVAULT 4Q ADJ. EPS 41C, EST. 34C :CVLT US (BLOOMBERG News - Bloomberg, 05/07/2013 07:40 AM)
											*COMMVAULT 4Q ADJ. EPS 41C, EST. 34C (Bloomberg First Word - Bloomberg, 05/07/2013 07:40 AM)
											*COMMVAULT 4Q REV. \$138.3M, EST. \$133.7M :CVLT US (BLOOMBERG News - Bloomberg, 05/07/2013 07:40 AM)
											Commvault 4Q Adj. EPS 41c, Est. 34c (Bloomberg First Word - Bloomberg, 05/07/2013 07:41 AM)
											*COMMVAULT SEES DOUBLE-DIGIT REV. GROWTH IN 2014 :CVLT US (BLOOMBERG News - Bloomberg, 05/07/2013 07:41 AM)
											CommVault Systems 4Q Adj. EPS, Rev. Beat Ests. (Bloomberg First Word - Bloomberg, 05/07/2013 07:44 AM)
											DJ CommVault Systems Files 8K - Operations And Financial Condition >CVLT (Dow Jones Newswires - Factiva, 05/07/2013 08:02 AM)
											$ \hbox{U.S. TMT Pre-Market: ARUN Prelim. Misses; EA, TRIP to Report (Bloomberg First Word - Bloomberg, 05/07/2013 08:06 AM) } \\$
											U.S. PRE-MARKET MOVERS: AKRX ARUN BAX BSFT GNRC HOLX MELI NLS (Bloomberg First Word - Bloomberg, 05/07/2013 08:52 AM)
											CORRECT U.S. EQUITY MOVERS: ARIA BAX FRC GGP HIMX MELI NSM PXD (Bloomberg First Word - Bloomberg, 05/07/2013 10:13 AM)
											DJ US HOT STOCKS: CVLT (Dow Jones Chinese Newswires English Content - Factiva, 05/07/2013 10:49 AM)
											DJ US HOT STOCKS: CVLT (Dow Jones Chinese Financial Wire - Factiva, 05/07/2013 10:49 AM)
											Elevated Options Volume: BSFT CFX CVLT DDS DISCA FIG GNK JAH (Bloomberg First Word - Bloomberg, 05/07/2013 01:29 PM)
											Strong demand and big contracts helps CommVault beat expectations for fiscal 4Q (Associated Press Newswires - Factiva, 05/07/2013 03:27 PM)
											CommVault Says Strong Demand Helps 4Q (Associated Press Newswires - Bloomberg, 05/07/2013 03:27 PM)
5/8/2013 Wed	647,246	\$77.49	1.52%	0.49%	-0.05%	0.68%	0.84%	\$0.64	0.49	62.21%	CommVault Sees Weakness (Investor's Business Daily - Factiva, 05/08/2013)

[1]	[2]	[3]	[4]	[5]	[6] Industry Excess	[7]	[8] Abnormal	[9] Abnormal Price	[10]	[11]	[12]
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events
											CommVault Spending, Economy Worry Investors Despite Q4 Beat Stock Makes High, Then Falls (Investor's Business Daily - Factiva, 05/08/2013)
											CommVault Systems, Inc. Patent Issued for System and Method for Automating Customer-Validated Statement of Work for a Data Storage Environment (Journal of Engineering - Factiva, 05/08/2013)
											CommVault Systems, Inc. Patent Issued for System and Method for Providing Encryption in Storage Operations in a Storage Network, Such as for Use by Application Service Providers That Provide Data Storage Services (Journal of Engineering - Factiva, 05/08/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/08/2013)
											FORM 8-K: COMMVAULT SYSTEMS FILES CURRENT REPORT (US Fed News - Factiva, 05/08/2013)
											Jefferies & Company Analyst Report (Analyst Report - Manual Entry, 05/08/2013)
											Summit Research Analyst Report (Analyst Report - Manual Entry, 05/08/2013)
5/9/2013 Thu	613,102	\$75.02	-3.19%	-0.06%	-0.67%	-0.75%	-2.43%	-\$1.89	-1.42	15.75%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 05/09/2013)
											CommVault Systems, Inc. Patent Issued for System and Method for Automating Customer-Validated Statement of Work for a Data Storage Environment (Computer Weekly News - Factiva, 05/09/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/09/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Apr. 18, 2013) (Computer Weekly News - Factiva, 05/09/2013)
											DJ CFO CAROLAN Sells 4,000 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 05/09/2013 05:26 PM)
											BRIAN CAROLAN, C.F.O., SELLS 4,000 ON 5/7/13 OF CVLT (Washington Service - Bloomberg, 05/09/2013 05:26 PM)
5/10/2013 Fri	394,006	\$75.41	0.52%	0.80%	-0.04%	1.21%	-0.69%	-\$0.52	-0.4	68.93%	COMMVAULT SYSTEMS REPORTS MULTIPLE TRANSACTIONS BY VP FINANCE CAROLAN (New Jersey) (US Fed News - Factiva, 05/10/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/10/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 05/10/2013)

Appendix C CommVault News Chronology with Daily Statistics

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Drice	Dotuen			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
5/11/2013 Sat	voiume	Trice	Keturn	Ketuiii	Ketuin	Ketuin	Ketuin	React	t-stat	p-value	USFedNewsService: COMMVAULT SYSTEMS REPORTS MULTIPLE TRANSACTIONS
5/11/2013 Sat 5/12/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 05/12/2013)
5/13/2013 Mon	488.163	\$73.82	-2.11%	0.07%	-0.61%	-0.53%	-1.58%	-\$1.19	-0.91	36.30%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/13/2013)
	,	***						•			Fuller & Thaler Asset Mgmt Holdings in 1st Quarter: 13F Alert (BLOOMBERG News - Bloomberg, 05/13/2013 09:10 AM)
5/14/2013 Tue	382,611	\$74.27	0.61%	0.74%	0.36%	1.41%	-0.80%	-\$0.59	-0.47	64.13%	COMMVAULT SYSTEMS INC 10-K (SEC - SEC Edgar, 05/14/2013)
											CommVault Systems, Inc. Patent Issued for Modular Systems and Methods for Managing Data Storage Operations (Information Technology Newsweekly - Factiva, 05/14/2013)
5/15/2013 Wed	485,158	\$73.38	-1.20%	0.27%	-0.22%	0.07%	-1.27%	-\$0.94	-0.74	45.84%	CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 05/15/2013)
											CommVault Systems, Inc. Patent Issued for Modular Systems and Methods for Managing Data Storage Operations (Journal of Engineering - Factiva, 05/15/2013)
											CommVault Systems, Inc. Patent Issued for Snapshot Storage and Management System with Indexing and User Interface (Journal of Engineering - Factiva, 05/15/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/15/2013)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 05/15/2013)
											CommVault Honors 2013 Global PartnerAdvantage Award Winners (PR Newswire (U.S.) - Factiva, 05/15/2013 08:30 AM)
											CommVault Honors 2013 Global PartnerAdvantage Award Winners (PR Newswire - Bloomberg, 05/15/2013 08:30 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on May 14 for "System and method for generating and managing quick (RE1 - Bloomberg, 05/15/2013 08:50 AM)
											DJ Renaissance Technologies 1Q 13F: Hldgs As Of Mar 31 (Dow Jones Institutional News - Factiva, 05/15/2013 09:40 AM)
											$\label{thm:commval} \textbf{USFedNewsService: US Patent Issued to CommVault Systems on May 14 for "Method and system for grouping storage system components" (RE1 - Bloomberg, 05/15/2013 10:01 AM)}$
											USFedNewsService: US Patent Issued to CommVault Systems on May 14 for "Asynchronous methods of data classification using change (RE1 - Bloomberg, 05/15/2013 10:03 AM)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Duias	Dotum	Market Return	Excess	Predicted Return	Abnormal Return	Price React	t stat	p-Value	Events
5/16/2013 Thu	510,044			-0.18%		0.31%	1.02%	\$0.75	t-stat	5 55.10%	CommVault Systems, Inc. Patent Issued for Modular Systems and Methods for Managing Data Storage Operations (Computer Weekly News - Factiva, 05/16/2013)
											CommVault Systems, Inc. Patent Issued for Snapshot Storage and Management System with Indexing and User Interface (Computer Weekly News - Factiva, 05/16/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/16/2013)
5/17/2013 Fri	526,441	\$74.80	0.59%	0.97%	-0.29%	1.22%	-0.62%	-\$0.46	-0.36	5 71.60%	Contract Award: CommVault Systems Wins Federal Contract for Information Technology Equipment (US Fed News - Factiva, 05/17/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/17/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 05/17/2013)
5/18/2013 Sat											USFedNewsService: Contract Award: CommVault Systems Wins Federal Contract for
5/19/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 05/19/2013)
											US Patent Issued to CommVault Systems on May 14 for "Asynchronous methods of data classification using change journals and other data structures" (New Jersey Inventor) (US Fed News - Factiva, 05/19/2013)
											$\label{thm:commvault} US Patent Issued to CommVault Systems on May 14 for "Method and system for grouping storage system components" (New Jersey Inventors) (US Fed News - Factiva, 05/19/2013) \\$
											US Patent Issued to CommVault Systems on May 14 for "System and method for generating and managing quick recovery volumes" (New Jersey, Washington Inventors) (US Fed News - Factiva, 05/19/2013)
5/20/2013 Mon	341,221	\$74.44	-0.48%	-0.07%	0.16%	-0.13%	-0.35%	-\$0.26	-0.21	83.78%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/20/2013)
											DJ CommVault Systems Inc, Inst Holders, 1Q 2013 (CVLT) (Dow Jones Newswires - Factiva, 05/20/2013 03:04 AM)
5/21/2013 Tue	344,679	\$73.19	-1.68%	0.17%	0.08%	0.16%	-1.84%	-\$1.37	-1.13	3 26.06%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/21/2013)
5/22/2013 Wed	1,267,364	\$67.09	-8.33%	-1.11%	-1.41%	-3.33%	-5.00%	-\$3.66	-3.05	5 0.28% **	Brean Capital, LLC Analyst Report (Analyst Report - Manual Entry, 05/22/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/22/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 05/22/2013)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry		[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											USFedNewsService: US Patent Issued to CommVault Systems on May 21 for "System and method for storage operation access security" (RE1 - Bloomberg, 05/22/2013 12:15 PM)
											U.S. EQUITY MOVERS: AMAG AMSC CETV FXEN INFI INSM MNKD SCTY TPX (Bloomberg First Word - Bloomberg, 05/22/2013 12:48 PM)
											U.S. WRAP: Stocks Drop Amid Stimulus Concerns (Bloomberg First Word - Bloomberg, 05/22/2013 04:30 PM)
5/23/2013 Thu	1,046,891	\$70.60	5.23%	-0.10%	0.80%	0.39%	4.84%	\$3.25	2.86	0.51% **	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 05/23/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/23/2013)
											Lake Street Capital Markets, LLC Analyst Report (Analyst Report - Manual Entry, 05/23/2013)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 05/23/2013)
											DJ COO BUNTE Sells 12,492 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 05/23/2013 04:34 PM)
											ALAN G BUNTE, C.O.O, SELLS 12,492 FROM 5/21/13-5/22/13 OF CVLT (Washington Service - Bloomberg, 05/23/2013 04:34 PM)
											DJ COO BUNTE Registers 34,192 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 05/23/2013 10:29 PM)
											COMMVAULT SYSTEMS INC: BUNTE ALAN G FILES TO SELL 34,192 SHARES (Washington Service - Bloomberg, 05/23/2013 10:33 PM)
5/24/2013 Fri	536,671	\$69.15	-2.05%	-0.01%	-0.15%	-0.41%	-1.64%	-\$1.16	-0.95	34.64%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/24/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 05/24/2013)
5/25/2013 Sat 5/26/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 05/26/2013)
5/27/2013 Mon 5/28/2013 Tue	466,537	\$71.11	2.83%	0.86%	0.33%	1.69%	1.15%	\$0.79	0.66	51.25%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/28/2013)
. ,			2270			22					CommVault Q4 net income increases (MarketLine (a Datamonitor Company), Company News - Factiva, 05/28/2013 06:25 AM)
5/29/2013 Wed	231,600	\$69.84	-1.79%	-0.60%	-0.04%	-1.39%	-0.40%	-\$0.28	-0.23	81.82%	CommVault Systems, Inc. Patent Issued for Method and System for Grouping Storage System Components (Journal of Engineering - Factiva, 05/29/2013)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											CommVault Systems, Inc. Patent Issued for System and Method for Generating and Managing Quick Recovery Volumes (Journal of Engineering - Factiva, 05/29/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/29/2013)
											Globaldata Analyst Report (Analyst Report - Manual Entry, 05/29/2013)
5/30/2013 Thu	300,783	\$71.40	2.23%	0.69%	0.76%	1.89%	0.35%	\$0.24	0.2	84.23%	CommVault Systems, Inc. Patent Issued for Method and System for Grouping Storage System Components (Computer Weekly News - Factiva, 05/30/2013)
											CommVault Systems, Inc. Patent Issued for System and Method for Generating and Managing Quick Recovery Volumes (Computer Weekly News - Factiva, 05/30/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/30/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 10-K, Annual Report [Section 13 And 15(D), Not S-K Item 405] (May. 14, 2013) (Computer Weekly News - Factiva, 05/30/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (May. 9, 2013) (Computer Weekly News - Factiva, 05/30/2013)
											Sterne Agee & Leach Analyst Report (Analyst Report - Manual Entry, 05/30/2013)
5/31/2013 Fri	281,820	\$70.06	-1.88%	-1.01%	0.38%	-1.67%	-0.21%	-\$0.15	-0.12	90.18%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 05/31/2013)
6/1/2013 Sat											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
6/2/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 06/02/2013)
6/3/2013 Mon	409,886	\$70.40	0.49%	0.29%	-0.46%	-0.29%	0.78%	\$0.55	0.45	65.20%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/03/2013)
6/4/2013 Tue	515,449	\$70.98	0.82%	-0.58%	-0.08%	-1.43%	2.25%	\$1.59	1.31	19.40%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/04/2013)
											Info-Tech Research Group Names CommVault A 'Champion' In Multiple Technology Software Reports (PR Newswire (U.S.) - Factiva, 06/04/2013 08:30 AM)
											Info-Tech Research Group Names CommVault A 'Champion' In Multiple Technology Software Reports (PR Newswire - Bloomberg, 06/04/2013 08:30 AM)
6/5/2013 Wed	305,230	\$69.83	-1.62%	-1.26%	0.47%	-2.00%	0.38%	\$0.27	0.22	82.78%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/05/2013)
											CommVault Executives To Address Investors At The 33rd Annual William Blair Growth Stock Conference (PR Newswire (U.S.) - Factiva, 06/05/2013 09:15 AM)
											CommVault Executives To Address Investors At The 33rd Annual William Blair Growth Stock Conference (PR Newswire - Bloomberg, 06/05/2013 09:15 AM)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
6/6/2013 Thu	347,630	\$69.80	-0.04%	0.67%	0.67%	1.78%	-1.83%	-\$1.28	-1.06	29.35%	Commvault Systems, Inc. Researchers Submit Patent Application, "System and Method for Allocation of Organizational Resources", for Approval (Computer Weekly News - Factiva, 06/06/2013)
											Commvault Systems, Inc. Researchers Submit Patent Application, "System and Method for Allocation of Organizational Resources", for Approval (Politics & Government Week - Factiva, 06/06/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/06/2013)
											S&P Global Compustat Company Analysis Analyst Report (Analyst Report - Manual Entry, 06/06/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 06/06/2013)
6/7/2013 Fri	207,763	\$71.37	2.25%	1.32%	-0.21%	1.90%	0.35%	\$0.24	0.2	84.13%	Credit Suisse Analyst Report (Analyst Report - Manual Entry, 06/07/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/07/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 06/07/2013)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 06/07/2013)
											Acquisitions, Innovative Solutions, Awards, and Contracts Boost App Software Makers' Margins and Inflows - Research Report on Salesforce.com, F5 Networks, Catamaran, CommVault, and MICROS Systems (PR Newswire (U.S.) - Factiva, 06/07/2013 08:00 AM)
											Acquisitions, Innovative Solutions, Awards, and Contracts Boost App Software Makers' Margins and Inflows - Research Report on (PR Newswire - Bloomberg, 06/07/2013 08:00 AM)
											*IGNORE: RESEARCH REPORT FROM WALL STREET REPORTS :CRM US (BLOOMBERG News - Bloomberg, 06/07/2013 08:13 AM)
6/8/2013 Sat 6/9/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 06/09/2013)
6/10/2013 Mon	227,524	\$72.46	1.53%	0.13%	-0.70%	-0.84%	2.37%	\$1.69	1.36	17.59%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/10/2013)
											*STORAGE SOFTWARE REVENUE UP 3.2% DURING 1Q OF '13 ACCORDING TO (BLOOMBERG News - Bloomberg, 06/10/2013 08:00 AM)
											Storage Software Revenues Increased 3.2% During the First Quarter of 2013, According to IDC (Business Wire - Bloomberg, 06/10/2013 08:00 AM)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Drigo	Doturn	Market Return	Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
6/11/2013 Tue				-1.06%		-2.66%	1.86%	\$1.35		28.94%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/11/2013)
											Gartner Names CommVault a Leader in its Magic Quadrant for Enterprise Backup/Recovery Software for Third Consecutive Year (PR Newswire (U.S.) - Factiva, 06/11/2013 08:30 AM)
											Gartner Names CommVault a Leader in its Magic Quadrant for Enterprise Backup/Recovery Software for Third Consecutive Year (PR Newswire - Bloomberg, 06/11/2013 08:30 AM)
6/12/2013 Wed	309,990	\$71.98	0.14%	-1.03%	0.25%	-1.80%	1.94%	\$1.40	1.11	27.10%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/12/2013)
											US Patent Issued to CommVault Systems on June 11 for "System and method for extended media retention" (Massachusetts, New Jersey Inventors) (US Fed News - Factiva, 06/12/2013)
											U.S. DAYBOOK: PVH, H&R Block Earns; Monthly Budget, Coty IPO (Bloomberg First Word - Bloomberg, 06/12/2013 05:30 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on June 11 for "System and method for extended media retention" (RE1 - Bloomberg, 06/12/2013 05:41 AM)
											$ \begin{tabular}{ll} USFedNewsService: US\ Patent\ Issued\ to\ CommVault\ Systems\ on\ June\ 11\ for\ "Systems\ and\ methods\ for\ performing\ replication\ copy\ (RE1\ -\ Bloomberg,\ 06/12/2013\ 08:11\ AM) \end{tabular}$
											$\label{thm:commvault} \textbf{USFedNewsService: US Patent Issued to CommVault Systems on June 11 for "System and method for improved media identification in a (RE1 - Bloomberg, 06/12/2013 09:09 AM)}$
6/13/2013 Thu	396,981	\$74.04	2.86%	1.32%	0.14%	2.29%	0.57%	\$0.41	0.32	74.69%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/13/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (May. 23, 2013) (Computer Weekly News - Factiva, 06/13/2013)
											William Blair & Company Analyst Report (Analyst Report - Manual Entry, 06/13/2013)
6/14/2013 Fri	707,352	\$75.27	1.66%	-0.63%	0.32%	-0.98%	2.64%	\$1.96	1.5	13.70%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/14/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 06/14/2013)
6/15/2013 Sat 6/16/2013 Sun 6/17/2013 Mon	525,754	\$76.91	2 18%	0.84%	0.49%	1.83%	0.34%	\$0.26	0.10	84.68%	Eva Dimensions Analyst Papart (Analyst Report Manual Entry 06/17/2013)
0/1//2013 WIOII	545,154	φ/0.71	2.10/0	U.O+/0	U.77/0	1.03/0	0.5470	φυ.Δυ	0.19	OT.00/0	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/17/2013)

[1]	[2]	[3]	[4]	[5] Market	[6] Industry Excess	[7] Predicted	[8]	[9] Abnormal Price	[10]	[11]	[12]
Date	Volume	Price	Return	Return		Return	Return	React	t-stat	p-Value	Events
											Collaborations, Awards, and Raised Revenue Guidance - Research Report on Windstream, CommVault, Rambus, Acuity Brands, and (PR Newswire - Bloomberg, 06/17/2013 08:00 AM)
											Collaborations, Awards, and Raised Revenue Guidance - Research Report on Windstream, CommVault, Rambus, Acuity Brands, and Diodes (PR Newswire (U.S.) - Factiva, 06/17/2013 08:01 AM)
											*IGNORE: COLLABORATIONS, AWARDS FROM WALL STREET REPORTS (BLOOMBERG News - Bloomberg, 06/17/2013 08:09 AM)
6/18/2013 Tue	706,961	\$78.80	2.46%	0.87%	-0.60%	0.66%	1.79%	\$1.38	1.01	31.51%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/18/2013)
											CommVault Systems Raised to 'Outperform' at Pacific Crest (BLOOMBERG News - Bloomberg, 06/18/2013 08:07 AM)
											*COMMVAULT RAISED TO OUTPERFORM VS SECTOR PERFORM: PACIFIC CREST (Bloomberg First Word - Bloomberg, 06/18/2013 08:27 AM)
											U.S. PRE-MARKET MOVERS: CAMT CYTK GNMK HRL NMFC OPK SFL SNE WLT (Bloomberg First Word - Bloomberg, 06/18/2013 08:38 AM)
											CommVault rises as analyst upgrades shares, expecting more market share on Simpana 10 sales (Associated Press Newswires - Factiva, 06/18/2013 03:42 PM)
											CommVault Systems Shares Rise Following Upgrade (Associated Press Newswires - Bloomberg, 06/18/2013 03:42 PM)
6/19/2013 Wed	621,656	\$77.03	-2.25%	-1.12%	0.17%	-1.97%	-0.27%	-\$0.22	-0.15	87.85%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/19/2013)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 06/19/2013)
											thm:usfedNewsService: US Patent Issued to CommVault Systems on June 18 for "Systems and methods of data storage management, such as (RE1 - Bloomberg, 06/19/2013 10:32 AM)
6/20/2013 Thu	442,225	\$76.00	-1.34%	-2.28%	0.09%	-4.11%	2.77%	\$2.14	1.55	12.30%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 06/20/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/20/2013)
											DJ Officer MERRILL Surrenders 24 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 06/20/2013 05:43 PM)
6/21/2013 Fri	742,914	\$77.12	1.47%	-0.22%	-0.60%	-1.16%	2.63%	\$2.00	1.46	14.63%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/21/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 06/21/2013)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 06/21/2013)
											CommVault Systems Inc Enters Wave 5 of Elliott Wave Cycle (Recognia Alert Wire - Bloomberg, 06/21/2013 05:09 PM)
6/22/2013 Sat 6/23/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 06/23/2013)
6/24/2013 Mon	631,587	\$76.57	-0.71%	-1.09%	-0.07%	-1.98%	1.26%	\$0.97	0.7	48.73%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/24/2013)
6/25/2013 Tue	343,682	\$77.01	0.57%	0.82%	-0.42%	0.77%	-0.19%	-\$0.15	-0.11	91.56%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/25/2013)
6/26/2013 Wed	595,405	\$78.98	2.56%	0.87%	0.18%	1.54%	1.02%	\$0.79	0.56	57.32%	CommVault Systems, Inc. Patent Issued for System and Method for Extended Media Retention (Journal of Engineering - Factiva, 06/26/2013)
											CommVault Systems, Inc. Patent Issued for System and Method for Improved Media Identification in a Storage Device (Journal of Engineering - Factiva, 06/26/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Performing Replication Copy Storage Operations (Journal of Engineering - Factiva, 06/26/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/26/2013)
											COMMVAULT SYSTEMS, INC., Plaintiff, v. PB&J SOFTWARE, LLC, (Bloomberg Legal Bloomberg News - Bloomberg, 06/26/2013 05:59 AM)
6/27/2013 Thu	451,169	\$79.73	0.95%	0.77%	1.49%	2.80%	-1.85%	-\$1.46	-1.02	30.82%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/27/2013)
6/28/2013 Fri	749,667	\$75.89	-4.82%	0.04%	-0.30%	-0.33%	-4.49%	-\$3.58	-2.48	1.45% *	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 06/28/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 06/28/2013)
											U.S. EQUITY MOVERS: ZINC SCTY ONXX TU LOGI ARNA OWW NIHD ALEX (Bloomberg First Word - Bloomberg, 06/28/2013 01:20 PM)
											U.S. WRAP: Stocks Fall as Investors Weigh Fed Comments (Bloomberg First Word - Bloomberg, 06/28/2013 04:29 PM)
6/29/2013 Sat 6/30/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 06/30/2013)
7/1/2013 Mon	451,169	\$76.10	0.28%	0.95%	0.13%	1.56%	-1.28%	-\$0.97	-0.7	48.39%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/01/2013)
	,										CommVault Named A Leader In Enterprise Backup And Recovery Software By Industry Analyst Firm (PR Newswire (U.S.) - Factiva, 07/01/2013 08:30 AM)

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CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
						Predicted	Abnormal	Abnormal Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events
											CommVault Named A Leader In Enterprise Backup And Recovery Software By Industry Analyst Firm (PR Newswire - Bloomberg, 07/01/2013 08:30 AM)
7/2/2013 Tue	344,587	\$75.52	-0.76%	-0.03%	-0.68%	-0.85%	0.09%	\$0.07	0.05	96.13%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/02/2013)
											Wright Investors Service Analyst Report (Analyst Report - Manual Entry, 07/02/2013)
7/3/2013 Wed	178,873	\$76.97	1.92%	0.30%	0.22%	0.58%	1.34%	\$1.02	0.75	45.78%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/03/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/03/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/03/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/03/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/03/2013)
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											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/03/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/03/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/03/2013)
											COMMVAULT SYSTEMS INC 4/A (SEC - SEC Edgar, 07/03/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/03/2013)
											U.S. EQUITY MOVERS: ABT BBY CMG ELX ISCA LINE MJN OSTK SPG UHS (Bloomberg First Word - Bloomberg, 07/03/2013 10:52 AM)
											DJ COO BUNTE Surrenders 220 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/03/2013 06:15 PM)
											ALAN G BUNTE, C.O.O, SURRENDERS 220 ON 7/2/13 OF CVLT (Washington Service - Bloomberg, 07/03/2013 06:15 PM)
											DJ CFO CAROLAN Surrenders 75 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/03/2013 06:16 PM)

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Return	Predicted Return	Return	Price React	t-stat	p-Value	Events
											DJ Chmn HAMMER Surrenders 288 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/03/2013 06:16 PM)
											N ROBERT HAMMER, C.O.B., SURRENDERS 288 ON 7/2/13 OF CVLT (Washington Service - Bloomberg, 07/03/2013 06:16 PM)
											DJ Chmn HAMMER Surrenders 1,734 Of COMMVAULT SYSTEMS INC >CVLT-Amended (Dow Jones Newswires - Factiva, 07/03/2013 06:19 PM)
											DJ Officer MERRILL Surrenders 31 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/03/2013 06:19 PM)
											DJ VP MICELI Surrenders 125 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/03/2013 06:19 PM)
											DJ VP MIILLER Surrenders 156 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/03/2013 06:19 PM)
											RONALD L MIILLER, Vice Pres., SURRENDERS 156 ON 7/2/13 OF CVLT (Washington Service - Bloomberg, 07/03/2013 06:19 PM)
											LOUIS F MICELI, Vice Pres., SURRENDERS 125 ON 7/2/13 OF CVLT (Washington Service - Bloomberg, 07/03/2013 06:19 PM)
											N ROBERT HAMMER,C.O.B.,SURRENDERS 1,734 FROM 4/2/13-4/16/13 -AMD (Washington Service - Bloomberg, 07/03/2013 06:19 PM)
											DAVID R WEST, Vice Pres., SURRENDERS 103 ON 7/2/13 OF CVLT (Washington Service - Bloomberg, 07/03/2013 06:20 PM)
											DJ VP WEST Surrenders 103 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/03/2013 06:20 PM)
7/4/2013 Thu											Commvault Systems, Inc. Agency Reviews Patent Application Approval Request for "Method and System for Leveraging Identified Changes to a Mail Server" (Politics & Government Week - Factiva, 07/04/2013)
											S&P Global Compustat Company Analysis Analyst Report (Analyst Report - Manual Entry, 07/04/2013)
7/5/2013 Fri	257,377	\$78.97	2.60%	1.04%	1.07%	2.62%	-0.03%	-\$0.02	-0.01	98.84%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/05/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 07/05/2013)
7/6/2013 Sat											

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
7/7/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 07/07/2013)
7/8/2013 Mon	254,116	\$77.65	-1.67%	0.16%	0.31%	0.50%	-2.17%	-\$1.71	-1.21	23.06%	Australia Patent: Commvault Systems Files Application for 'Systems and methods for managing single instancing data' (Australian Government News - Factiva, 07/08/2013)
											COMMVAULT SYSTEMS INC DEF 14A (SEC - SEC Edgar, 07/08/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/08/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 07/08/2013)
											*PRESTIGIOUS AWARDS, NEW CONTRACTS,, ACQUISITIONS - RESEARCH (BLOOMBERG News - Bloomberg, 07/08/2013 08:01 AM)
											Prestigious Awards, New Contracts, and Acquisitions - Research Report on F5 Networks, Adobe, Red Hat, CommVault, and Level 3 (PR Newswire - Bloomberg, 07/08/2013 08:01 AM)
											Prestigious Awards, New Contracts, and Acquisitions - Research Report on F5 Networks, Adobe, Red Hat, CommVault, and Level 3 (PR Newswire (U.S.) - Factiva, 07/08/2013 08:02 AM)
7/9/2013 Tue	516,767	\$79.76	2.71%	0.56%	0.18%	0.98%	1.74%	\$1.35	0.96	33.85%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/09/2013)
											CommVault Announces Earnings Release Date (PR Newswire (U.S.) - Factiva, 07/09/2013 09:15 AM)
											CommVault Announces Earnings Release Date (PR Newswire - Bloomberg, 07/09/2013 09:15 AM)
7/10/2013 Wed	588,452	\$81.19	1.80%	0.48%	0.25%	0.94%	0.85%	\$0.68	0.47	63.96%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/10/2013)
											Fund Swivels Beyond Technology Weightings Adjust Oppenheimer Discovery bobs and weaves to market-beating gains (Investor's Business Daily - Factiva, 07/10/2013)
											Stocks Narrowly Mixed Ahead Of Fed Minutes (Investor's Business Daily - Factiva, 07/10/2013)
											USFedNewsService: US Patent Issued to CommVault Systems on July 9 for "Systems and methods of media management, such as (RE1 - Bloomberg, 07/10/2013 08:50 AM)
											thm:usfedNewsService: US Patent Issued to CommVault Systems on July 9 for "De-duplication systems and methods for application (RE1 - Bloomberg, 07/10/2013 10:16 AM)

Appendix C CommVault News Chronology with Daily Statistics

m	(2)	[2]	140	(5)	10	(7)	ro)	roı	[10]	[11]	. [14]
[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
7/11/2013 Thu	336,652	\$81.90	0.87%	1.64%	-0.07%	2.48%	-1.61%	-\$1.31	-0.89	37.77%	Australia Patent: Commvault Systems Files Application for 'Systems and methods for managing single instancing data' (Australian Government News - Factiva, 07/11/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/11/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Jun. 20, 2013) (Computer Weekly News - Factiva, 07/11/2013)
											Sadif Analytics Analyst Report (Analyst Report - Manual Entry, 07/11/2013)
7/12/2013 Fri	294,643	\$81.58	-0.39%	0.61%	-0.15%	0.72%	-1.11%	-\$0.91	-0.61	54.38%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/12/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 07/12/2013)
7/13/2013 Sat 7/14/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 07/14/2013)
7/15/2013 Mon	467,047	\$80.84	-0.91%	0.21%	0.29%	0.53%	-1.43%	-\$1.17	-0.79	43.29%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/15/2013)
7/16/2013 Tue	563,138	\$79.15	-2.09%	-0.25%	-0.04%	-0.58%	-1.51%	-\$1.22	-0.83	40.56%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/16/2013)
7/17/2013 Wed	428,342	\$79.99	1.06%	0.32%	-0.04%	0.30%	0.76%	\$0.60	0.42	67.47%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/17/2013)
											USFedNewsService: US Patent Issued to CommVault Systems on July 16 for "Systems and methods for performing data replication" (RE1 - Bloomberg, 07/17/2013 09:36 AM)
7/18/2013 Thu	503,186	\$79.81	-0.23%	0.04%	0.43%	0.33%	-0.55%	-\$0.44	-0.31	75.92%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/18/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/18/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/18/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/18/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/18/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/18/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 07/18/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/18/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Jul. 3, 2013) (Computer Weekly News - Factiva, 07/18/2013)

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return	Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											ALAN G BUNTE, C.O.O, SURRENDERS 1,241 ON 7/16/13 OF CVLT (Washington Service - Bloomberg, 07/18/2013 05:09 PM)
											N ROBERT HAMMER, C.O.B., SURRENDERS 1,524 ON 7/16/13 OF CVLT (Washington Service - Bloomberg, 07/18/2013 05:09 PM)
											BRIAN CAROLAN, C.F.O., SURRENDERS 448 ON 7/16/13 OF CVLT (Washington Service - Bloomberg, 07/18/2013 05:09 PM)
											GARY MERRILL,Officer,SURRENDERS 157 ON 7/16/13 OF CVLT (Washington Service - Bloomberg, 07/18/2013 05:09 PM)
											DJ CFO CAROLAN Surrenders 448 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/18/2013 05:10 PM)
											DJ Chmn HAMMER Surrenders 1,524 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/18/2013 05:10 PM)
											DJ COO BUNTE Surrenders 1,241 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/18/2013 05:10 PM)
											DJ Officer MERRILL Surrenders 157 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/18/2013 05:10 PM)
											DJ VP MICELI Surrenders 685 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/18/2013 05:11 PM)
											DJ VP MIILLER Surrenders 848 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/18/2013 05:11 PM)
											DJ VP WEST Surrenders 645 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 07/18/2013 05:11 PM)
											LOUIS F MICELI, Vice Pres., SURRENDERS 685 ON 7/16/13 OF CVLT (Washington Service - Bloomberg, 07/18/2013 05:11 PM)
											RONALD L MIILLER, Vice Pres., SURRENDERS 848 ON 7/16/13 OF CVLT (Washington Service - Bloomberg, 07/18/2013 05:11 PM)
											DAVID R WEST, Vice Pres., SURRENDERS 645 ON 7/16/13 OF CVLT (Washington Service - Bloomberg, 07/18/2013 05:11 PM)
7/19/2013 Fri	407,503	\$80.51	0.88%	-0.66%	0.85%	-0.19%	1.07%	\$0.85	0.6	55.04%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/19/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 07/19/2013)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											CommVault to Webcast Annual Meeting (PR Newswire (U.S.) - Factiva, 07/19/2013 09:15 AM)
											CommVault to Webcast Annual Meeting (PR Newswire - Bloomberg, 07/19/2013 09:15 AM)
7/20/2013 Sat 7/21/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 07/21/2013)
											US Patent Issued to CommVault Systems on July 16 for "Systems and methods for performing data replication" (New Jersey Inventor) (US Fed News - Factiva, 07/21/2013)
7/22/2013 Mon	367,515	\$78.92	-1.97%	0.36%	-0.26%	0.13%	-2.10%	-\$1.69	-1.18	24.02%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/22/2013)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 07/22/2013)
7/23/2013 Tue	352,970	\$78.51	-0.52%	-0.59%	0.44%	-0.54%	0.02%	\$0.02	0.01	99.06%	CommVault Systems, Inc. Patent Issued for De-Duplication Systems and Methods for Application-Specific Data (Information Technology Newsweekly - Factiva, 07/23/2013)
											Craig-Hallum Capital Group Analyst Report (Analyst Report - Manual Entry, 07/23/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 07/23/2013)
7/24/2013 Wed	289,417	\$80.76	2.87%	0.01%	-0.09%	-0.22%	3.09%	\$2.42	1.74	8.44%	U.S. EQUITY MOVERS: AAPL ARW BRCM CAT DELL EMC LLY SLRC SRPT (Bloomberg First Word - Bloomberg, 07/24/2013 10:39 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on July 23 for "Registry key federation systems and methods" (New Jersey (RE1 - Bloomberg, 07/24/2013 11:15 AM)
7/25/2013 Thu	338,894	\$80.89	0.16%	0.72%	-0.58%	0.35%	-0.19%	-\$0.15	-0.1	91.76%	CommVault Systems, Inc. Patent Issued for De-Duplication Systems and Methods for Application-Specific Data (Computer Weekly News - Factiva, 07/25/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form DEF 14A, Other Definitive Proxy Statements (Jul. 8, 2013) (Computer Weekly News - Factiva, 07/25/2013)
7/26/2013 Fri	477,198	\$78.56	-2.88%	0.22%	-2.50%	-2.73%	-0.15%	-\$0.12	-0.08	93.41%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/26/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 07/26/2013)

[1]	[2]	[2]	[4]	[5]	[6]	[7]	191	101	[10]	[11]	[12]
[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											$ \textbf{Stocks Slip Quietly Deeper; Halliburton Booms On Settlement} \ (Investor's \ Business \ Daily-Factiva, 07/26/2013) $
7/27/2013 Sat											CommVault Systems, Inc. Patent Issued for De-Duplication Systems and Methods for
7/28/2013 Sun											Lazard Capital Markets Analyst Report (Analyst Report - Manual Entry, 07/28/2013)
											Summit Research Analyst Report (Analyst Report - Manual Entry, 07/28/2013)
											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 07/28/2013)
7/29/2013 Mon	911,688	\$77.57	-1.26%	-0.38%	0.25%	-0.44%	-0.82%	-\$0.65	-0.46	64.67%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/29/2013)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 07/29/2013)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 07/29/2013)
											Stocks Off Lows In Afternoon; Sohu Dives On Earnings (Investor's Business Daily - Factiva, 07/29/2013)
											New CommVault Edge Solutions Deliver Sync, Search And Protection For The Mobile Workforce (PR Newswire (U.S.) - Factiva, 07/29/2013 08:30 AM)
											New CommVault Edge Solutions Deliver Sync, Search And Protection For The Mobile Workforce (PR Newswire - Bloomberg, 07/29/2013 08:30 AM)
7/30/2013 Tue	2,108,195	\$85.04	9.63%	0.49%	0.06%	0.76%	8.87%	\$6.88	5.02	0.00% **	Australian Patent Office Grants Patent for 'Data object store and server for a cloud storage environment' (Australian Government News - Factiva, 07/30/2013)
											CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 07/30/2013)
											CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 07/30/2013)
											CommVault Earnings, Revenue Easily Beat; Stock Soars (Investor's Business Daily - Factiva, 07/30/2013)
											COMMVAULT SYSTEMS INC 8-K (SEC - SEC Edgar, 07/30/2013)
											CommVault Systems Inc Reaffirms FY 2014 Guidance-Conference Call (Reuters Significant Developments - Factiva, 07/30/2013)
											Credit Suisse Analyst Report (Analyst Report - Manual Entry, 07/30/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/30/2013)
											Event Brief of Q1 2014 CommVault Earnings Conference Call - Final (CQ FD Disclosure - Factiva, 07/30/2013)
											Jefferies & Company Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

	[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
					Market	•	Predicted	Abnormal	Price			
I	Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events

JMP Securities Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Lake Street Capital Markets, LLC Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Lazard Capital Markets Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Lazard Capital Markets Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Needham & Company Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Q1 2014 CommVault Earnings Conference Call - Final (CQ FD Disclosure - Factiva, 07/30/2013)

Raymond James & Associates Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Sterne Agee & Leach Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Stocks Stay Higher; Nasdaq Hits Multiyear High (Investor's Business Daily - Factiva, 07/30/2013)

Summit Research Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

William Blair & Company Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 07/30/2013)

U.S. DAYBOOK: Merck, Coach, Amgen, Aetna Earns; CFTC, SEC Heads (Bloomberg First Word - Bloomberg, 07/30/2013 05:30 AM)

CommVault Announces First Quarter Fiscal 2014 Financial Results (PR Newswire (U.S.) - Factiva, 07/30/2013 07:40 AM)

*COMMVAULT SYSTEMS 1Q NON-GAAP EPS 40C :CVLT US (BLOOMBERG News - Bloomberg, 07/30/2013 07:40 AM)

 [1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12
				Market	Excess	Predicted	Abnormal	Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Even

*COMMVAULT SYSTEMS 1Q REV. \$134.4M :CVLT US (BLOOMBERG News - Bloomberg, 07/30/2013 07:40 AM)

*COMMVAULT SYSTEMS 1Q REV. UP 21% :CVLT US (BLOOMBERG News - Bloomberg, 07/30/2013 07:40 AM)

*COMMVAULT SYSTEMS 1Q SERVICE REV. \$69.1M :CVLT US (BLOOMBERG News - Bloomberg, 07/30/2013 07:40 AM)

*COMMVAULT SYSTEMS 1Q SOFTWARE LICENSES REV. \$65.3M :CVLT US (BLOOMBERG News - Bloomberg, 07/30/2013 07:40 AM)

CommVault Announces First Quarter Fiscal 2014 Financial Results (PR Newswire - Bloomberg, 07/30/2013 07:40 AM)

*COMMVAULT 1Q ADJ. EPS 40C, EST. 34C :CVLT US (BLOOMBERG News - Bloomberg, 07/30/2013 07:40 AM)

*COMMVAULT 1Q REV. \$134.4M, EST. \$132.4M :CVLT US (BLOOMBERG News - Bloomberg, 07/30/2013 07:40 AM)

*COMMVAULT 1Q ADJ. EPS 40C, EST. 34C (Bloomberg First Word - Bloomberg, 07/30/2013 07:41 AM)

U.S. TMT Pre-Market: QCOM Invests in Alcatel; FTNT, JIVE Report (Bloomberg First Word - Bloomberg, 07/30/2013 07:46 AM)

DJ CommVault Systems Files 8K - Operations And Financial Condition >CVLT (Dow Jones Newswires - Factiva, 07/30/2013 07:47 AM)

CommVault 1Q Adj. EPS 40c, Est. 34c (Bloomberg First Word - Bloomberg, 07/30/2013 07:47 AM)

U.S. PRE-MARKET MOVERS: AEGR ALU HLF IPI LLEN MOS NATI NES OSK P (Bloomberg First Word - Bloomberg, 07/30/2013 09:04 AM)

DJ US HOT STOCKS: CVLT (Dow Jones Chinese Financial Wire - Factiva, 07/30/2013 10:50 AM)

DJ US HOT STOCKS: CVLT (Dow Jones Chinese Newswires English Content - Factiva, 07/30/2013 10:50 AM)

U.S. EQUITY MOVERS: COH CYH GLW GT HMA HRS MOS NDAQ PBI WU X XYL (Bloomberg First Word - Bloomberg, 07/30/2013 11:04 AM)

	[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
1	Date	Volume	Price	Return	Market Return	Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
												U.S. Stock Options With Biggest Changes in Implied Volatility (BLOOMBERG News - Bloomberg, 07/30/2013 11:30 AM)
												$ \begin{tabular}{ll} \textbf{MW CommVault, Sprint help pace tech gains} & (MarketWatch-Factiva, 07/30/2013\ 11:32\ AM) \end{tabular} $
												$ \begin{tabular}{ll} \textbf{MW UPDATE: CommVault, Sprint help pace tech gains (MarketWatch-Factiva, 07/30/2013 \\ 11:33~AM) \end{tabular} $
												MW UPDATE: Facebook closes in on IPO price as techs gain (MarketWatch - Factiva, $07/30/2013\ 01:05\ PM)$
												MW UPDATE: Facebook closes in on IPO price as techs gain (MarketWatch - Factiva, $07/30/2013\ 01:06\ PM$)
												Top 10 Nasdaq-traded stocks posting largest percentage increases (Associated Press Newswires - Factiva, 07/30/2013 01:49 PM)
												DJ US HOT STOCKS: CVLT (Dow Jones Chinese Financial Wire - Factiva, 07/30/2013 01:51 PM)
												DJ US HOT STOCKS: CVLT (Dow Jones Chinese Newswires English Content - Factiva, 07/30/2013 01:51 PM)
												CommVault posts 33 pct. increase in fiscal 1Q net income on demand for software platform (Associated Press Newswires - Factiva, 07/30/2013 02:42 PM)
												CommVault 1Q Net Income Up 33 Pct. (Associated Press Newswires - Bloomberg, 07/30/2013 02:42 PM)
												$\label{loomberg} \mbox{U.S. Stock Options With Biggest Changes in Implied Volatility} \mbox{ (BLOOMBERG News-Bloomberg, } 07/30/2013 03:00 \mbox{ PM)}$
												Elevated Options Volume: BAH BIOD CYH DBC DKS DLX DRC FB FIG IBB (Bloomberg First Word - Bloomberg, $07/30/2013$ 03:52 PM)
												U.S. WRAP: Stocks Little Changed Ahead of Fed Statement Tomorrow (Bloomberg First Word - Bloomberg, 07/30/2013 04:43 PM)
												DJ US HOT STOCKS: GIMO (Dow Jones Chinese Newswires English Content - Factiva, 07/30/2013 05:25 PM)
												DJ US HOT STOCKS: GNRC (Dow Jones Chinese Newswires English Content - Factiva, 07/30/2013 05:34 PM)
7/31/	/2013 Wed	601,602	\$84.40	-0.75%	0.28%	0.95%	1.45%	-2.21%	-\$1.88	-1.25	21.37%	CommVault Q1 earnings top (Investor's Business Daily - Factiva, 07/31/2013)

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Daturn	Market Return	Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
Date	volume	Trice	Keturn	Keturn	Keturn	Keturii	Keturn	Keacı	t-stat	p-v arue	Craig-Hallum Capital Group Analyst Report (Analyst Report - Manual Entry, 07/31/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 07/31/2013)
											FORM 8-K: COMMVAULT SYSTEMS FILES CURRENT REPORT (US Fed News - Factiva, 07/31/2013)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 07/31/2013)
											Notable Options Open Interest: APD BCRX CBG CHTR CVLT DRC EXPE H (Bloomberg First Word - Bloomberg, 07/31/2013 09:30 AM)
8/1/2013 Thu	802,808	\$87.72	3.93%	1.36%	2.50%	4.88%	-0.95%	-\$0.80	-0.54	59.33%	Australia: Commvault Systems Receives Patent for 'Systems and methods for managing single instancing data' (Australian Government News - Factiva, 08/01/2013)
											Australia: Commvault Systems Receives Patent for 'Using a snapshot as a data source' (Australian Government News - Factiva, 08/01/2013)
											COMMVAULT SYSTEMS INC 10-Q (SEC - SEC Edgar, 08/01/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 08/01/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/01/2013)
											S&P Global Compustat Company Analysis Analyst Report (Analyst Report - Manual Entry, 08/01/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 08/01/2013)
											CommVault unveils new Edge software capabilities for mobile workforce (MarketLine (a Datamonitor Company), Company News - Factiva, 08/01/2013 02:36 AM)
											DJ Officer MERRILL Sells 1,219 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 08/01/2013 04:23 PM)
											GARY MERRILL,Officer,SELLS 1,219 ON 7/30/13 OF CVLT (Washington Service - Bloomberg, 08/01/2013 04:23 PM)
8/2/2013 Fri	586,779	\$87.75	0.03%	0.38%	-0.83%	-0.43%	0.47%	\$0.41	0.27	79.04%	CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 08/02/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/02/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, $08/02/2013$)

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											USFedNewsService: COMMVAULT SYSTEMS REPORTS MULTIPLE TRANSACTIONS BY CHIEF ACCOUNTING OFFICER MERRILL (New Jersey) (RE1 - Bloomberg, 08/02/2013 02:50 AM)
8/3/2013 Sat											Australian Patent Office Grants Patent for 'Data object store and server for a cloud storage environment' (Australian Government News - Factiva, 08/03/2013)
											COMMVAULT SYSTEMS REPORTS MULTIPLE TRANSACTIONS BY CHIEF ACCOUNTING OFFICER MERRILL (New Jersey) (US Fed News - Factiva, 08/03/2013)
8/4/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 08/04/2013)
8/5/2013 Mon	388,786	\$87.83	0.09%	0.12%	0.00%	0.07%	0.02%	\$0.02	0.01	99.13%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/05/2013)
											William Blair & Company Analyst Report (Analyst Report - Manual Entry, 08/05/2013)
8/6/2013 Tue	469,864	\$88.51	0.77%	-0.73%	-0.86%	-2.19%	2.97%	\$2.61	1.7	9.15%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 08/06/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/06/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 08/06/2013)
											CommVault Systems Q1 net income increases (MarketLine (a Datamonitor Company), Company News - Factiva, 08/06/2013 08:27 AM)
											DJ VP MIILLER Sells 72,501 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 08/06/2013 04:05 PM)
											RONALD L MIILLER, Vice Pres., SELLS 72,501 ON 8/2/13 OF CVLT (Washington Service - Bloomberg, 08/06/2013 04:05 PM)
8/7/2013 Wed	425,634	\$87.55	-1.08%	-0.32%	-0.42%	-1.03%	-0.06%	-\$0.05	-0.03	97.48%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 08/07/2013)
											CommVault Systems, Inc. Patent Issued for Registry Key Federation Systems and Methods (Journal of Engineering - Factiva, 08/07/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/07/2013)
											US Patent Issued to CommVault Systems on Aug. 6 for "Storage of application specific profiles correlating to document versions" (New Jersey, New York Inventors) (US Fed News - Factiva, $08/07/2013$)
											Growing User Base, Acquisitions, and New Technology Platforms Boost Revenues - Research Report on Catamaran, AVG Technologies, Ellie Mae, CommVault, and Fortinet (PR Newswire (U.S.) - Factiva, 08/07/2013 08:02 AM)

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											Growing User Base, Acquisitions, and New Technology Platforms Boost Revenues - Research Report on Catamaran, AVG Technologies, (PR Newswire - Bloomberg, 08/07/2013 08:02 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Aug. 6 for "Kernel swapping systems and methods for recovering a (RE1 - Bloomberg, 08/07/2013 09:02 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Aug. 6 for "Failover system and methods for performing backup (RE1 - Bloomberg, 08/07/2013 09:04 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Aug. 6 for "Storage of application specific profiles correlating to (RE1 - Bloomberg, 08/07/2013 09:18 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Aug. 6 for "Email attachment management in a computer system" (New (RE1 - Bloomberg, 08/07/2013 10:00 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Aug. 6 for "Systems and methods for performing multi-path storage (RE1 - Bloomberg, 08/07/2013 12:30 PM)
											$\label{thm:usfine} \begin{tabular}{ll} USFedNewsService: US\ Patent\ Issued\ to\ CommVault\ Systems\ on\ Aug.\ 6\ for\ "Systems\ and\ methods\ for\ selective\ data\ replication"\ (RE1\ -\ Bloomberg,\ 08/07/2013\ 01:09\ PM) \end{tabular}$
											$\label{thm:commvault} \textbf{USFedNewsService: US Patent Issued to CommVault Systems on Aug. 6 for "Stubbing systems and methods in a data replication (RE1 - Bloomberg, 08/07/2013 02:23 PM)}$
											DJ COO BUNTE Sells 30,000 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 08/07/2013 04:43 PM)
											ALAN G BUNTE, C.O.O, SELLS 30,000 ON 8/5/13 OF CVLT (Washington Service - Bloomberg, 08/07/2013 04:43 PM)
											DJ VP MIILLER Registers 72,501 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 08/07/2013 10:42 PM)
											COMMVAULT SYSTEMS INC: MIILLER RONALD L FILES TO SELL 72,501 SHA (Washington Service - Bloomberg, 08/07/2013 10:48 PM)
											DJ COO BUNTE Registers 30,000 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 08/07/2013 11:04 PM)
8/2013 Thu	367,913	\$86.63	-1.05%	0.47%	0.35%	1.00%	-2.05%	-\$1.79	-1.17	24.62%	Commvault Systems, Inc. "Pipeline Systems and Method for Transferring Data in a Network Environment" in Patent Application Approval Process (Computer Weekly News - Factiva, 09/09/2012)

08/08/2013)

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return	Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
										•	Commvault Systems, Inc. "Pipeline Systems and Method for Transferring Data in a Network Environment" in Patent Application Approval Process (Politics & Government Week - Factiva, 08/08/2013)
											CommVault Systems, Inc. Patent Issued for Registry Key Federation Systems and Methods (Computer Weekly News - Factiva, 08/08/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/08/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Jul. 18, 2013) (Computer Weekly News - Factiva, 08/08/2013)
											US Patent Issued to CommVault Systems on Aug. 6 for "Kernel swapping systems and methods for recovering a network device" (New Jersey Inventors) (US Fed News - Factiva, 08/08/2013)
8/9/2013 Fri	239,529	\$86.34	-0.33%	-0.25%	0.33%	-0.13%	-0.21%	-\$0.18	-0.12	90.52%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/09/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 08/09/2013)
											US Patent Issued to CommVault Systems on Aug. 6 for "Failover systems and methods for performing backup operations" (New Jersey Inventors) (US Fed News - Factiva, 08/09/2013)
8/10/2013 Sat 8/11/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 08/11/2013)
8/12/2013 Mon	179,504	\$87.15	0.94%	0.27%	0.53%	0.89%	0.05%	\$0.04	0.03	97.70%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 08/12/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/12/2013)
											DJ VP WEST Gifts 175 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 08/12/2013 04:05 PM)
8/13/2013 Tue	131,758	\$86.64	-0.59%	0.43%	0.15%	0.73%	-1.32%	-\$1.15	-0.75	45.23%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/13/2013)
8/14/2013 Wed	175,127	\$86.08	-0.65%	-0.40%	0.02%	-0.70%	0.05%	\$0.04	0.03	97.77%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/14/2013)
											thm:usfedNewsService: US Patent Issued to CommVault Systems on Aug.~13 for "Systems and methods for sharing media in a computer (RE1 - Bloomberg, 08/14/2013 06:26 AM)
8/15/2013 Thu	574,389	\$82.72	-3.90%	-1.72%	-0.42%	-3.19%	-0.72%	-\$0.62	-0.41	68.19%	USFedNewsService: US Patent Issued to CommVault Systems on Aug. 13 for "System and method for encrypting secondary copies of (RE1 - Bloomberg, 08/14/2013 10:13 AM) Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/15/2013)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]		[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 8-K, Current Report (Jul. 30, 2013) (Computer Weekly News - Factiva, 08/15/2013)
8/16/2013 Fri	405,656	\$82.07	-0.79%	-0.09%	0.15%	-0.09%	-0.69%	-\$0.57	-0.4	69.16%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/16/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 08/16/2013)
											Small-Cap Stocks Led Summer; Are They Set For A Fall? (Investor's Business Daily - Factiva, 08/16/2013)
8/17/2013 Sat											US Patent Issued to CommVault Systems on Aug. 13 for "Systems and methods for sharing media in a computer network" (Canadian, American Inventors) (US Fed News - Factiva,
8/18/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 08/18/2013)
8/19/2013 Mon	349,997	\$81.90	-0.21%	-0.38%	-0.16%	-0.86%	0.65%	\$0.54	0.37	70.84%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/19/2013)
8/20/2013 Tue	253,172	\$82.75	1.04%	0.69%	0.01%	0.96%	0.08%	\$0.06	0.04	96.57%	CommVault Systems, Inc. Patent Issued for Kernel Swapping Systems and Methods for Recovering a Network Device (Information Technology Newsweekly - Factiva, 08/20/2013)
											CommVault Systems, Inc. Patent Issued for Stubbing Systems and Methods in a Data Replication Environment (Information Technology Newsweekly - Factiva, 08/20/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Selective Data Replication (Information Technology Newsweekly - Factiva, 08/20/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/20/2013)
											DJ CommVault Systems Inc, Inst Holders, 2Q 2013 (CVLT) (Dow Jones Institutional News - Factiva, 08/20/2013 03:20 AM)
											CommVault Solves Virtual Machine Sprawl with New Simpana VM Archiving (PR Newswire (U.S.) - Factiva, 08/20/2013 08:30 AM)
											$\label{loop commval} \textbf{CommVault Solves Virtual Machine Sprawl with New Simpana VM Archiving} \ (PR \ Newswire - Bloomberg, 08/20/2013\ 08:30\ AM)$
8/21/2013 Wed	296,064	\$83.02	0.33%	-0.38%	-0.58%	-1.31%	1.63%	\$1.35	0.94	35.14%	CommVault Systems, Inc. Patent Issued for Email Attachment Management in a Computer System (Journal of Engineering - Factiva, 08/21/2013)
											CommVault Systems, Inc. Patent Issued for Failover Systems and Methods for Performing Backup Operations (Journal of Engineering - Factiva, 08/21/2013)
											CommVault Systems, Inc. Patent Issued for Kernel Swapping Systems and Methods for Recovering a Network Device (Journal of Engineering - Factiva, 08/21/2013)

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return	Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											CommVault Systems, Inc. Patent Issued for Storage of Application Specific Profiles Correlating to Document Versions (Journal of Engineering - Factiva, 08/21/2013)
											CommVault Systems, Inc. Patent Issued for Stubbing Systems and Methods in a Data Replication Environment (Journal of Engineering - Factiva, 08/21/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Performing Multi-Path Storage Operations (Journal of Engineering - Factiva, 08/21/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Selective Data Replication (Telecommunications Weekly - Factiva, 08/21/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/21/2013)
											U.S. DAYBOOK: Lowe's, Target, HP Earnings; FOMC Minutes (Bloomberg First Word - Bloomberg, 08/21/2013 05:30 AM)
											U.S. TMT Pre-Market: INTU 1Q Forecast Beats; HPQ to Report (Bloomberg First Word - Bloomberg, 08/21/2013 07:36 AM)
8/22/2013 Thu	310,571	\$86.32	3.97%	1.08%	-0.06%	1.50%	2.48%	\$2.06	1.41	16.00%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 08/22/2013)
											CommVault Systems, Inc. Patent Issued for Email Attachment Management in a Computer System (Computer Weekly News - Factiva, 08/22/2013)
											CommVault Systems, Inc. Patent Issued for Kernel Swapping Systems and Methods for Recovering a Network Device (Computer Weekly News - Factiva, 08/22/2013)
											CommVault Systems, Inc. Patent Issued for Storage of Application Specific Profiles Correlating to Document Versions (Computer Weekly News - Factiva, 08/22/2013)
											CommVault Systems, Inc. Patent Issued for Stubbing Systems and Methods in a Data Replication Environment (Computer Weekly News - Factiva, 08/22/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Performing Multi-Path Storage Operations (Computer Weekly News - Factiva, 08/22/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Selective Data Replication (Computer Weekly News - Factiva, 08/22/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/22/2013)
											Lazard Capital Markets Analyst Report (Analyst Report - Manual Entry, 08/22/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 10-Q, Quarterly Report [Sections 13 Or 15(D)] (Aug. 1, 2013) (Computer Weekly News - Factiva, 08/22/2013)

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
				Market	Industry Excess	Predicted	Abnormal	Abnormal Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Aug. 1, 2013) (Computer Weekly News - Factiva, 08/22/2013)
											Stocks Hold, Strong And Steady; Coal, Iron Ore Up On China PMI (Investor's Business Daily - Factiva, 08/22/2013)
											Stocks Step Up In Solid Trade: Game Stop Spikes On Strong Q2 (Investor's Business Daily - Factiva, 08/22/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 08/22/2013)
											*COMMVAULT PT RAISED TO \$115 FROM \$95 AT LAZARD (Bloomberg First Word - Bloomberg, 08/22/2013 06:57 AM)
											U.S. PRE-MARKET MOVERS: ANF CVO CYTK DRYS HAIN HPQ NM NOAH PLCE (Bloomberg First Word - Bloomberg, 08/22/2013 08:48 AM)
											U.S. EQUITY MOVERS: ANF BONT GME HAIN HPQ KIRK SHLDS SWI VVTV (Bloomberg First Word - Bloomberg, 08/22/2013 10:41 AM)
											Red Hat And Other Software Stocks That May Beat Revenue Estimates (RHT) (Benzinga.com - Factiva, 08/22/2013 01:28 PM)
											*TRADING HALTED:(CVLT) Regulatory Halt - Extraordinary Market (BLOOMBERG News - Bloomberg, 08/22/2013 02:08 PM)
											*QUOTATION RESUMED:(CVLT) News and Resumption Times (BLOOMBERG News - Bloomberg, $08/22/2013\ 03:11\ PM$)
											*TRADING RELEASED/RESUMED:(CVLT) Reason Not Available (BLOOMBERG News - Bloomberg, $08/22/2013\ 03:27\ PM)$
											DJ Dir FANZILLI Sells 4,000 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 08/22/2013 04:05 PM)
											FRANK J FANZILLI, Director, SELLS 4,000 ON 8/20/13 OF CVLT (Washington Service - Bloomberg, 08/22/2013 04:05 PM)
											U.S. WRAP: Stocks Climb Amid Nasdaq Halt (Bloomberg First Word - Bloomberg, 08/22/2013 04:30 PM)
8/23/2013 Fri	304,886	\$85.52	-0.93%	0.52%	-0.32%	0.40%	-1.33%	-\$1.15	-0.76	45.16%	COMMVAULT SYSTEMS INC 8-K (SEC - SEC Edgar, 08/23/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/23/2013)

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 08/23/2013)
											DJ CHART Commvault Systems Inc ST: target 75.9 (Dow Jones Institutional News - Factiva, 08/23/2013 10:14 AM)
											DJ CommVault Systems Files 8K - Changes Exec Mgmt > CVLT (Dow Jones Newswires - Factiva, 08/23/2013 04:04 PM)
8/24/2013 Sat											FORM 8-K: COMMVAULT SYSTEMS FILES CURRENT REPORT (US Fed News -
8/25/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 08/25/2013)
8/26/2013 Mon	213,550	\$86.31	0.92%	0.00%	0.30%	0.21%	0.71%	\$0.61	0.41	68.60%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/26/2013)
											COMMVAULT SYSTEMS INC: FANZILLI FRANK J FILES TO SELL 4,000 SHAR (Washington Service - Bloomberg, 08/26/2013 10:24 PM)
											DJ Dir FANZILLI Registers 4,000 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 08/26/2013 10:26 PM)
											Example Restricted Stock Sale History: Dir Files To Sell CVLT-CO (Washington Service - Bloomberg, 08/26/2013 10:40 PM)
8/27/2013 Tue	274,626	\$83.42	-3.35%	-2.16%	-0.37%	-3.84%	0.50%	\$0.43	0.28	77.88%	Commvault Systems, Inc. "Combined Stream Auxiliary Copy System and Method" in Patent Application Approval Process (Information Technology Newsweekly - Factiva, 08/27/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/27/2013)
											Globaldata Analyst Report (Analyst Report - Manual Entry, 08/27/2013)
											Sterne Agee & Leach Analyst Report (Analyst Report - Manual Entry, 08/27/2013)
											Partnerships, Reports, Acquisitions Highlight Tech Companies - Research Report on 3D Systems, CommVault Systems, Check Point, (PR Newswire - Bloomberg, 08/27/2013 08:00 AM)
											Partnerships, Reports, Acquisitions Highlight Tech Companies - Research Report on 3D Systems, CommVault Systems, Check Point, Concur, and Ellie Mae (PR Newswire (U.S.) - Factiva, 08/27/2013 08:01 AM)
8/28/2013 Wed	413,528	\$85.35	2.31%	0.42%	-0.23%	0.35%	1.96%	\$1.63	1.11	26.77%	CommVault Systems, Inc. Patent Issued for Systems and Methods for Sharing Media in a Computer Network (Journal of Engineering - Factiva, 08/28/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/28/2013)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal Price	[10]	[11]	[12]
Date	Volume	Price	Return	Return	Excess Return	Return	Abnormal Return	React	t-stat	p-Value	Events
8/29/2013 Thu	143,024	\$85.65	0.35%	0.75%	-0.35%	0.77%	-0.42%	-\$0.36	-0.24	81.43%	Commvault Systems, Inc. "Combined Stream Auxiliary Copy System and Method" in Patent Application Approval Process (Computer Weekly News - Factiva, 08/29/2013)
											Commvault Systems, Inc. Patent Application Titled "Systems and Methods for Performing Storage Operations in a Computer Network" Published Online (Computer Weekly News - Factiva, 08/29/2013)
											Commvault Systems, Inc. Patent Application Titled "Systems and Methods for Performing Storage Operations in a Computer Network" Published Online (Politics & Government Week - Factiva, 08/29/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Sharing Media in a Computer Network (Computer Weekly News - Factiva, 08/29/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/29/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Aug. 12, 2013) (Computer Weekly News - Factiva, 08/29/2013)
8/30/2013 Fri	263,064	\$83.83	-2.12%	-0.83%	-0.45%	-1.80%	-0.33%	-\$0.28	-0.19	85.28%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 08/30/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 08/30/2013)
											DJ CHART Commvault Systems Inc ST: target 74.2 (Dow Jones Institutional News - Factiva, 08/30/2013 10:20 AM)
8/31/2013 Sat 9/1/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 09/01/2013)
9/2/2013 Mon 9/3/2013 Tue	495,756	\$83.06	-0.92%	0.63%	-0.67%	0.26%	-1.18%	-\$0.99	-0.67	50.69%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/03/2013)
											$\label{lem:commVault} \textbf{CommVault Delivers Industry-Leading Customer Satisfaction For Third Consecutive Year} \ (PR\ Newswire\ (U.S.)\ -\ Factiva,\ 09/03/2013\ 08:30\ AM)$
											CommVault Delivers Industry-Leading Customer Satisfaction For Third Consecutive Year (PR Newswire - Bloomberg, 09/03/2013 08:30 AM)
9/4/2013 Wed	230,419	\$84.38	1.59%	1.02%	0.13%	1.63%	-0.04%	-\$0.03	-0.02	98.20%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/04/2013)
9/5/2013 Thu	200,531	\$85.26	1.04%	0.27%	0.45%	0.70%	0.34%	\$0.29	0.21	83.22%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/05/2013)
											Greg Dunn Cooks With 3 Flavors Of Growth Stocks (Investor's Business Daily - Factiva, 09/05/2013)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return	Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											S&P Global Compustat Company Analysis Analyst Report (Analyst Report - Manual Entry, 09/05/2013)
9/6/2013 Fri	175,177	\$84.57	-0.81%	0.04%	-0.22%	-0.28%	-0.53%	-\$0.45	-0.33	74.55%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/06/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 09/06/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 09/06/2013)
9/7/2013 Sat 9/8/2013 Sun											That a 4 Coa Data and a Data 4 (Analyst Data 4 Manual Enter 00/08/2012)
9/9/2013 Sun 9/9/2013 Mon	104,518	\$85.60	1.22%	1.27%	0.45%	2.22%	-1.00%	-\$0.85	-0.62	53.82%	Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 09/08/2013) Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/09/2013)
	. ,	,						,			Technology, Internet Issues Well Represented In IBD 50 (Investor's Business Daily - Factiva, 09/09/2013)
9/10/2013 Tue	163,730	\$86.99	1.62%	0.62%	1.21%	1.93%	-0.30%	-\$0.26	-0.19	85.17%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/10/2013)
9/11/2013 Wed	174,628	\$86.52	-0.54%	-0.10%	0.48%	0.16%	-0.70%	-\$0.61	-0.43	66.77%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/11/2013)
											Tech Reasserts Status Among Top Industries (Investor's Business Daily - Factiva, 09/11/2013)
											Storage Software Revenues Increased 4.1% in the Second Quarter of 2013, According to IDC (Business Wire - Bloomberg, 09/11/2013 08:30 AM)
											*STORAGE SOFTWARE REVENUES INCREASED 4.1% 2Q, IDC SAYS (BLOOMBERG News - Bloomberg, 09/11/2013 08:34 AM)
											*STORAGE SOFTWARE REVENUE WAS ALMOST \$3.5B IN 2Q, IDC SAYS (BLOOMBERG News - Bloomberg, 09/11/2013 08:34 AM)
											Storage Software Revenue Increased 4.1% in 2Q, IDC Says (Bloomberg First Word - Bloomberg, 09/11/2013 08:42 AM)
9/12/2013 Thu	216,228	\$85.03	-1.72%	-0.24%	0.23%	-0.31%	-1.41%	-\$1.22	-0.87	38.67%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/12/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 8-K, Current Report (Aug. 23, 2013) (Computer Weekly News - Factiva, 09/12/2013)
9/13/2013 Fri	149,860	\$85.01	-0.02%	0.17%	-0.20%	-0.11%	0.08%	\$0.07	0.05	95.87%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/13/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 09/13/2013)
9/14/2013 Sat											USFedNewsService: WIPO PUBLISHES PATENT OF COMMVAULT SYSTEMS FOR

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return	Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
9/15/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 09/15/2013)
9/16/2013 Mon	183,458	\$85.08	0.08%	-0.12%	0.45%	0.07%	0.01%	\$0.01	0.01	99.29%	Australia: CommVault Systems Receives Patent for 'Systems and methods for normalizing data of heterogeneous data sources' (Australian Government News - Factiva, 09/16/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/16/2013)
9/17/2013 Tue	257,609	\$86.85	2.08%	0.75%	-0.06%	0.89%	1.19%	\$1.01	0.73	46.66%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/17/2013)
											WIPO PUBLISHES PATENT OF COMMVAULT SYSTEMS FOR "AUTOMATED, TIERED DATA RETENTION" (AMERICAN INVENTORS) (US Fed News - Factiva, 09/17/2013)
9/18/2013 Wed	224,642	\$88.42	1.81%	1.01%	-0.31%	1.07%	0.74%	\$0.64	0.45	65.22%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/18/2013)
											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 09/18/2013)
											USFedNewsService: US Patent Issued to CommVault Systems on Sept. 17 for "Systems and methods of media management, such as (RE1 - Bloomberg, 09/18/2013 02:24 PM)
9/19/2013 Thu	190,880	\$88.28	-0.16%	0.15%	-0.19%	-0.10%	-0.06%	-\$0.05	-0.03	97.23%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 09/19/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/19/2013)
											Ladenburg Thalmann & Company Analyst Report (Analyst Report - Manual Entry, 09/19/2013)
											DJ Officer MERRILL Surrenders 24 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 09/19/2013 04:07 PM)
9/20/2013 Fri	677,971	\$87.39	-1.01%	-0.39%	0.14%	-0.62%	-0.39%	-\$0.34	-0.24	81.02%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/20/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 09/20/2013)
											DJ CHART Commvault Systems Inc ST: the upside prevails as long as 84.4 is support (Dow Jones Institutional News - Factiva, 09/20/2013 10:18 AM)
9/21/2013 Sat											
9/22/2013 Sun 9/23/2013 Mon	256 017	¢97 20	0.019/	-0.25%	0.219/	-0.85%	0.84%	\$0.73	0.52	60.31%	Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 09/22/2013)
9/23/2013 IVION	230,917	φδ/.38	-0.01%	-0.23%	-0.31%	-0.83%	U.84%	δU./3	0.32	00.51%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/23/2013)
											Open Text Seen Lifting As European Economy Picks Up (Investor's Business Daily - Factiva, 09/23/2013)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry			[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											Real Estate Roundup: Office leases for Sept. 23 (Portland Business Journal Online - Factiva, 09/23/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 09/23/2013)
9/24/2013 Tue	296,140	\$85.27	-2.41%	0.08%	-0.09%	-0.10%	-2.32%	-\$2.03	-1.46	14.69%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 09/24/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/24/2013)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 09/24/2013)
											DJ VP MICELI Sells 7,091 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 09/24/2013 04:06 PM)
											LOUIS F MICELI,Vice Pres.,SELLS 7,091 ON 9/20/13 OF CVLT (Washington Service - Bloomberg, 09/24/2013 04:06 PM)
											COMMVAULT SYSTEMS INC: MICELI LOUIS F FILES TO SELL 7,091 SHARES (Washington Service - Bloomberg, 09/24/2013 10:28 PM)
											DJ VP MICELI Registers 7,091 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 09/24/2013 10:46 PM)
9/25/2013 Wed	230,440	\$86.92	1.94%	-0.19%	0.65%	0.18%	1.76%	\$1.50	1.1	27.40%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/25/2013)
9/26/2013 Thu	425,594	\$88.95	2.34%	0.72%	0.12%	1.06%	1.28%	\$1.11	0.81	42.17%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/26/2013)
9/27/2013 Fri	258,071	\$87.21	-1.96%	-0.15%	-0.42%	-0.69%	-1.27%	-\$1.13	-0.8	42.52%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/27/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 09/27/2013)
											DJ CHART Commvault Systems Inc ST: the upside prevails as long as 84 is support (Dow Jones Institutional News - Factiva, 09/27/2013 01:06 PM)
9/28/2013 Sat 9/29/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 09/29/2013)
9/30/2013 Mon	249,218	\$87.92	0.81%	-0.26%	-0.01%	-0.49%	1.30%	\$1.13	0.82	41.49%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 09/30/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 09/30/2013)
											$ \begin{tabular}{ll} \textbf{U.S. Stocks Testing Trendline Argues for Caution: Oppenheimer} & \textbf{Oppenheimer} & \textbf$
10/1/2013 Tue	531,133	\$89.45	1.74%	1.25%	0.02%	1.82%	-0.08%	-\$0.07	-0.05	95.95%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/01/2013)

Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
										•	Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 10/01/2013)
10/2/2013 Wed	383,855	\$88.87	-0.65%	-0.08%	0.18%	-0.01%	-0.64%	-\$0.57	-0.41	68.32%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/02/2013)
											Splunk Delivers Enterprise Software Via Cloud (Investor's Business Daily - Factiva, $10/02/2013$)
											Stocks Open Lower, Trade Mixed; McDonald's, Electronic Arts Slip (Investor's Business Daily - Factiva, 10/02/2013)
10/3/2013 Thu	301,310	\$87.50	-1.54%	-1.07%	-0.21%	-1.88%	0.34%	\$0.30	0.22	82.60%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/03/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/03/2013)
											Loomis Sayles Managers' Small Ball Hits Home Runs (Investor's Business Daily - Factiva, 10/03/2013)
											DJ VP WEST Sells 5,895 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 10/03/2013 04:46 PM)
											DAVID R WEST, Vice Pres., SELLS 5,895 ON 10/1/13 OF CVLT (Washington Service - Bloomberg, 10/03/2013 04:46 PM)
											COMMVAULT SYSTEMS INC: WEST DAVID R FILES TO SELL 5,895 SHARES (Washington Service - Bloomberg, 10/03/2013 10:20 PM)
											DJ VP WEST Registers 5,895 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 10/03/2013 10:21 PM)
10/4/2013 Fri	238,769	\$88.86	1.55%	0.89%	-0.06%	1.20%	0.36%	\$0.31	0.23	81.64%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/04/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/04/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/04/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/04/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/04/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/04/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/04/2013)
											$\textbf{Jefferson Research \& Management Analyst Report} \ (Analyst \ Report - Manual \ Entry, \\ 10/04/2013)$

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											CommVault Announces Earnings Release Date (PR Newswire (U.S.) - Factiva, 10/04/2013 09:15 AM)
											CommVault Announces Earnings Release Date (PR Newswire - Bloomberg, 10/04/2013 09:15 AM)
											DJ COO BUNTE Surrenders 222 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 10/04/2013 04:15 PM)
											ALAN G BUNTE, C.O.O, SURRENDERS 222 ON 10/2/13 OF CVLT (Washington Service - Bloomberg, 10/04/2013 04:15 PM)
											DJ CFO CAROLAN Surrenders 76 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 10/04/2013 04:16 PM)
											DJ Chmn HAMMER Surrenders 291 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 10/04/2013 04:16 PM)
											N ROBERT HAMMER, C.O.B., SURRENDERS 291 ON 10/2/13 OF CVLT (Washington Service - Bloomberg, 10/04/2013 04:16 PM)
											DJ Officer MERRILL Surrenders 32 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 10/04/2013 04:17 PM)
											DJ VP MICELI Surrenders 126 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 10/04/2013 04:18 PM)
											LOUIS F MICELI, Vice Pres., SURRENDERS 126 ON 10/2/13 OF CVLT (Washington Service - Bloomberg, 10/04/2013 04:18 PM)
											DJ VP MIILLER Surrenders 158 Of COMMVAULT SYSTEMS INC >CVLT (Dow Jones Newswires - Factiva, 10/04/2013 04:19 PM)
											RONALD L MIILLER, Vice Pres., SURRENDERS 158 ON 10/2/13 OF CVLT (Washington Service - Bloomberg, 10/04/2013 04:19 PM)
10/5/2013 Sat											USFedNewsService: WIPO PUBLISHES PATENT OF COMMVAULT SYSTEMS FOR "INFORMATON MANAGEMENT OF MOBILE DEVICE DATA" (AMERICAN (RE1 -
10/6/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 10/06/2013)
10/7/2013 Mon	376,912	\$87.87	-1.11%	-0.98%	-0.51%	-1.96%	0.85%	\$0.76	0.55	58.00%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/07/2013)
10/8/2013 Tue	462,083	\$86.05	-2.07%	-2.00%	0.31%	-2.82%	0.74%	\$0.65	0.49	62.76%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/08/2013)
10/9/2013 Wed	434,897	\$84.60	-1.69%	-0.45%	0.18%	-0.57%	-1.12%	-\$0.96	-0.73	46.64%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/09/2013)
10/10/2013 Thu	297,452	\$85.99	1.64%	2.26%	0.27%	3.48%	-1.84%	-\$1.56	-1.2	23.26%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/10/2013)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess	Predicted Return		Price React	t-stat	p-Value	Events
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Sept. 19, 2013) (Computer Weekly News - Factiva, 10/10/2013)
10/11/2013 Fri	295,260	\$87.20	1.41%	0.83%	0.25%	1.30%	0.11%	\$0.09	0.07	94.51%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/11/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 10/11/2013)
10/12/2013 Sat											Wright Investors Service Analyst Report (Analyst Report - Manual Entry, 10/11/2013)
											Product Launches, Investors Conferences, Company Preferments, and Common Stocks - Research Report on AVG, CommVault, Cornerstone, MICROS, and ACTIVE (PR Newswire (U.S.) - Factiva, 10/11/2013 08:00 AM)
											*PRODUCT LAUNCHES, INVESTORS CONFERENCES, CO. PREFERMENTS,, (BLOOMBERG News - Bloomberg, 10/11/2013 08:00 AM)
											Product Launches, Investors Conferences, Company Preferments, and Common Stocks - Research Report on AVG, CommVault, (PR Newswire - Bloomberg, 10/11/2013 08:00 AM)
10/12/2013 Sat 10/13/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 10/13/2013)
10/14/2013 Mon	232,121	\$87.73	0.61%	0.62%	-0.50%	0.33%	0.27%	\$0.24	0.18	85.87%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/14/2013)
											Recent Ascending Bases Point To Need To Adjust Expectations (Investor's Business Daily - Factiva, 10/14/2013)
10/15/2013 Tue	1,579,129	\$81.69	-6.88%	-0.56%	-1.52%	-2.20%	-4.68%	-\$4.11	-3.05	0.29% **	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/15/2013)
											Late-Day Selling Hits Stocks; Yahoo, Intel Results In Focus (Investor's Business Daily - Factiva, 10/15/2013)
											Lazard Capital Markets Analyst Report (Analyst Report - Manual Entry, 10/15/2013)
											Selling Picks Up The Pace; Synaptics, Apple Buck The Trend (Investor's Business Daily - Factiva, 10/15/2013)
											Software Cos. INFA, CVLT, MSTR Drop After TDC Prelim. Miss (Bloomberg First Word - Bloomberg, 10/15/2013 10:24 AM)
											U.S. EQUITY MOVERS: ASTC ATI CBB ECYT ESI GTN IVZ MTSL JCP X WPX (Bloomberg First Word - Bloomberg, 10/15/2013 12:35 PM)

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Note Price Return Return Return Return Return Return Return Return Return Price Return Retur	re:	161	10.		,		re:	10.	10.			·
Part	[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
U.S. WRAP: Stocks Drop as Washington Continues Without Agreement (Bloomberg First Word - Bloomberg, 1015/2013 04:28 PM) 10/16/2013 Wed 525.512 \$83.37 2.06% 1.20% -0.05% 1.53% 0.53% \$0.43 0.33 74.11% COMMVALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/16/2013) Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/16/2013) Lazard Capital Markets Reiterates Buy on CommVault Systems Following Share Pressures (Benigae, com - Factiva, 10/16/2013) 4.11 PM) ALAN G BUNTEC.CO.SURRENDERS 1,983 ON 10/15/13 OF CYLT (Washington Service - Bloomberg, 10/16/2013 04:11 PM) N ROBERT HAMMER.C.O.B., SURRENDERS 1,983 ON 10/15/13 OF CYLT (Washington Service - Bloomberg, 10/16/2013 04:11 PM) CARY WERENTLL Office-SYRERENDERS 2,898 ON 10/15/13 OF CYLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) LOUIS F MICELLIvice Pres., SURRENDERS 2,898 ON 10/15/13 OF CYLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) DAVID R SERVIVE Pres., SURRENDERS 2,809 ON 10/15/13 OF CYLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM) DAVID R SERVIVE Pres., SURRENDERS 2,809 ON 10/15/13 OF CYLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM) DAVID R SERVIVE Pres., SURRENDERS 2,809 ON 10/15/13 OF CYLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM)	_					Excess	Predicted		Price			
Word - Bloomberg, 10/15/2013 04/28 PM) 10/16/2013 Wed 525,512 \$83.37 2.00% 1.20% -0.05% 1.53% 0.53% \$0.43 0.33 74.11% COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMYALLT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/16/2013) Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/16/2013) Lazard Capital Markets Reiterates Buy on CommVault Systems Following Share Pressures (Benzinga.com - Factiva, 10/16/2013 12-48 PM) ALANG BUNTEC.O.D.SURRENDERS 1.293 ON 10/15/13 OF CVLT (Washington Service Bloomberg, 10/16/2013 04:12 PM) NROBERT HAMMER.C.O.B.SURRENDERS 5.693 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) CARY MERRILL.Officer.SURRENDERS 5.693 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) NROBERT HAMMER.C.O.B.SURRENDERS 5.898 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) DAVIR RESTLICE PERS.SURRENDERS 2.898 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM) DAVIR RESTLICE PERS.SURRENDERS 2.898 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM) DAVIR RESTLICE PERS.SURRENDERS 2.898 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM)	Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	
COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/16/2013) Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 10/16/2013) Lazard Capital Markets Reiterates Buy on CommVault Systems Following Share Pressures (Benzinga.com - Factiva, 10/16/2013 12:48 PM) ALAN G BINTEC.O.O.SURRENDERS 1,293 ON 10/15/13 OF CVLT (Washington Service Bloomberg, 10/16/2013 04:11 PM) BRIAN CAROLANIC.E-O.SURRENDERS 1,293 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:12 PM) AROBERT HAMMER.C.O.B.SURRENDERS 5,693 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:12 PM) GARY MERRILL.Officer.SURRENDERS 5,693 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) LOUIS FMICELLIVICE Pres.SURRENDERS 2,113 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) BONALD L MILLER.Vice Pres.SURRENDERS 2,898 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) DAVID R WEST.Vice Pres.SURRENDERS 2,067 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM)												
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COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013) EVA Dimensions Analyst Report (Analyst Report - Manual Entry, 10/16/2013) Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/16/2013) Lazard Capital Markets Reiterates Buy on CommVault Systems Following Share Pressures (Benzinga.com - Factiva, 10/16/2013 12/48 PM) ALAN G BUNTEC.CO.SURRENDERS 1,293 ON 10/15/13 OF CVLT (Washington Service Bloomberg, 10/16/2013 04:11 PM) BRIAN CAROLAN.C.E.O.SURRENDERS 1,983 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:12 PM) N ROBERT HAMMER.C.O.B.SURRENDERS 5,693 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:12 PM) GARY MERRILLLOfficer-SURRENDERS 698 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) LOUIS F MICELLLYice Pres.SURRENDERS 2,898 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:13 PM) RONALD L MIILLER, Vice Pres.SURRENDERS 2,898 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM) DAVID R WEST, Vice Pres.SURRENDERS 2,067 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM)												COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/16/2013)
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Service - Bloomberg, 10/16/2013 04:15 PM)												RONALD L MIILLER, Vice Pres., SURRENDERS 2,898 ON 10/15/13 OF CVLT (Washington Service - Bloomberg, 10/16/2013 04:15 PM)
10/17/2013 Thu 480,845 \$85.67 2.76% 0.62% -0.27% 0.48% 2.28% \$1.90 1.44 15.22% Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/17/2013)												· · · · · · · · · · · · · · · · · · ·
	10/17/2013 Thu	480,845	\$85.67	2.76%	0.62%	-0.27%	0.48%	2.28%	\$1.90	1.44	15.22%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/17/2013)

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											-
[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
										•	CommVault's 'Hockey Helping Kids' Opens 14th Season Supporting Children's Charities with Expanded Roster of NHL Venues, Sponsors (PR Newswire (U.S.) - Factiva, 10/17/2013 08:30 AM)
											CommVault's 'Hockey Helping Kids' Opens 14th Season Supporting Children's Charities with Expanded Roster of NHL Venues, (PR Newswire - Bloomberg, 10/17/2013 08:30 AM)
10/18/2013 Fri	367,684	\$87.33	1.94%	1.32%	-0.05%	1.76%	0.18%	\$0.16	0.11	90.92%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/18/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 10/18/2013)
											CHART Commvault Systems Inc ST: eye 77.4 (Dow Jones Institutional News - Factiva, 10/18/2013 01:04 PM)
10/19/2013 Sat											Australia Patent: Commvault Systems Files Application for 'Information management of
10/20/2013 Sun											Summit Research Analyst Report (Analyst Report - Manual Entry, 10/20/2013)
											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 10/20/2013)
10/21/2013 Mon	407,519	\$87.49	0.18%	0.15%	0.36%	0.52%	-0.34%	-\$0.29	-0.21	83.29%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/21/2013)
											Market Edge Analyst Report (Analyst Report - Manual Entry, 10/21/2013)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 10/21/2013)
											Summit Research Analyst Report (Analyst Report - Manual Entry, 10/21/2013)
											CommVault Intelligent Archive Solution Makes Content Retention, Compliance And Cloud Storage More Affordable (PR Newswire (U.S.) - Factiva, 10/21/2013 08:30 AM)
											CommVault Intelligent Archive Solution Makes Content Retention, Compliance And Cloud Storage More Affordable (PR Newswire - Bloomberg, 10/21/2013 08:30 AM)
10/22/2013 Tue	468,536	\$86.96	-0.61%	0.24%	0.18%	0.46%	-1.07%	-\$0.93	-0.67	50.39%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/22/2013)
											CommVault Intelligent Archive Solution Makes Content Retention, Compliance And Cloud Storage More Affordable (PR Newswire (U.S.) - Factiva, 10/22/2013 03:58 PM)
10/23/2013 Wed	399.219	\$85.74	-1.40%	-0.57%	-0.47%	-1.50%	0.10%	\$0.08	0.07	94.80%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/23/2013)
10/20/2010 Wed	5,2,219	200., 1	1	3.2 , 70	3,,0	1.00.0	0.1070	ψ0.00	0.07		USFedNewsService: US Patent Issued to CommVault Systems on Oct. 22 for "Hierarchical
											systems and methods for performing data (RE1 - Bloomberg, 10/23/2013 07:46 AM)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return	Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
10/24/2013 Thu	390,852	\$85.07	-0.78%	0.56%	-1.42%	-1.20%	0.42%	\$0.36	0.28	77.91%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/24/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Oct. 3, 2013) (Computer Weekly News - Factiva, 10/24/2013)
10/25/2013 Fri	416,048	\$83.95	-1.32%	0.37%	-0.33%	-0.06%	-1.26%	-\$1.07	-0.85	39.88%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/25/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/25/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/25/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/25/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/25/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/25/2013)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 10/25/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/25/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 10/25/2013)
10/26/2013 Sat 10/27/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 10/27/2013)
10/28/2013 Mon	1,072,021	\$82.50	-1.73%	-0.08%	0.30%	0.14%	-1.86%	-\$1.56	-1.26	21.19%	COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR FANZILLI (New Jersey) (US Fed News - Factiva, 10/28/2013)
											COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR GEDAY (New Jersey) (US Fed News - Factiva, 10/28/2013)
											COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR GEESLIN (New Jersey) (US Fed News - Factiva, 10/28/2013)
											COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR KURIMSKY (New Jersey) (US Fed News - Factiva, 10/28/2013)
											COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR PULVER (New Jersey) (US Fed News - Factiva, 10/28/2013)
											COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR SMITH (New Jersey) (US Fed News - Factiva, 10/28/2013)
											COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR WALKER (New Jersey) (US Fed News - Factiva, 10/28/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/28/2013)

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[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
				Market	Industry	Predicted	Abnormal	Abnormal Price			
Date	Volume	Price	Return			Return	Return	React	t-stat	p-Value	Events
											Elevated Options Volume: ADM AEO AMTD BHB BMY CAG CAR CF CHS (Bloomberg First Word - Bloomberg, 10/28/2013 03:30 PM)
10/29/2013 Tue	3,055,227	\$80.51	-2.41%	0.32%	-0.04%	0.21%	-2.62%	-\$2.16	-1.76	8.15%	CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											COMMVAULT SYSTEMS INC 8-K (SEC - SEC Edgar, 10/29/2013)
											CommVault Systems Inc Reaffirms FY 2014 Guidance-Conference Call (Reuters Significant Developments - Factiva, 10/29/2013)
											Credit Suisse Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Event Brief of Q2 2014 CommVault Earnings Conference Call - Final (CQ FD Disclosure - Factiva, 10/29/2013)
											Jefferies & Company Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Lake Street Capital Markets, LLC Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Lazard Capital Markets Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Q2 2014 CommVault Earnings Conference Call - Final (CQ FD Disclosure - Factiva, 10/29/2013)
											Raymond James & Associates Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Sterne Agee & Leach Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 10/29/2013)
											Stocks Mixed In Firm Trade; Cummins, CommVault Systems Dive (Investor's Business Daily - Factiva, 10/29/2013)
											Summit Research Analyst Report (Analyst Report - Manual Entry, 10/29/2013)

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Appendix C CommVault News Chronology with Daily Statistics

 [1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12
					Industry			Abnormal			
				Market	Excess	Predicted	Abnormal	Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events

US Patent Issued to CommVault Systems on Oct. 29 for "Systems and methods for performing data replication" (New Jersey Inventor) (US Fed News - Factiva, 10/29/2013)

William Blair & Company Analyst Report (Analyst Report - Manual Entry, 10/29/2013)

Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 10/29/2013)

USFedNewsService: COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR WALKER (New Jersey) (RE1 - Bloomberg, 10/29/2013 03:50 AM)

USFedNewsService: COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR FANZILLI (New Jersey) (RE1 - Bloomberg, 10/29/2013 03:57 AM)

USFedNewsService: COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR GEESLIN (New Jersey) (RE1 - Bloomberg, 10/29/2013 04:31 AM)

USFedNewsService: COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR SMITH (New Jersey) (RE1 - Bloomberg, 10/29/2013 04:31 AM)

USFedNewsService: COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR PULVER (New Jersey) (RE1 - Bloomberg, 10/29/2013 04:31 AM)

USFedNewsService: COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR GEDAY (New Jersey) (RE1 - Bloomberg, 10/29/2013 04:32 AM)

USFedNewsService: COMMVAULT SYSTEMS REPORTS ACQUISITION BY DIRECTOR KURIMSKY (New Jersey) (RE1 - Bloomberg, 10/29/2013 04:33 AM)

CommVault Announces Second Quarter Fiscal 2014 Financial Results (PR Newswire (U.S.) - Factiva, 10/29/2013 07:40 AM)

*COMMVAULT SYSTEMS 2Q EPS 35C :CVLT US (BLOOMBERG News - Bloomberg, 10/29/2013 07:40 AM)

*COMMVAULT SYSTEMS 2Q NON-GAAP EPS 48C :CVLT US (BLOOMBERG News - Bloomberg, 10/29/2013 07:40 AM)

*COMMVAULT SYSTEMS 2Q REV. \$141.9M :CVLT US (BLOOMBERG News - Bloomberg, 10/29/2013 07:40 AM)

*COMMVAULT SYSTEMS 2Q REV. UP 20% :CVLT US (BLOOMBERG News - Bloomberg, 10/29/2013 07:40 AM)

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•	[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
	Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
•											•	*COMMVAULT SYSTEMS 2Q SERVICE REV. \$71.0M :CVLT US (BLOOMBERG News - Bloomberg, 10/29/2013 07:40 AM)
												*COMMVAULT SYSTEMS 2Q SOFTWARE LICENSES REV. \$70.8M :CVLT US (BLOOMBERG News - Bloomberg, 10/29/2013 07:40 AM)
												CommVault Announces Second Quarter Fiscal 2014 Financial Results (PR Newswire - Bloomberg, 10/29/2013 07:40 AM)
												*COMMVAULT REPORTS 2Q ADJ. EPS 48C, EST. 40C (Bloomberg First Word - Bloomberg, 10/29/2013 07:40 AM)
												*COMMVAULT REPORTS 2Q REVENUE OF \$141.9M, EST. \$140.1M (BLOOMBERG News - Bloomberg, 10/29/2013 07:40 AM)
												*COMMVAULT AUTHORIZED \$47.2M BOOST TO BUYBACK PROGRAM OCT. 24 (BLOOMBERG News - Bloomberg, 10/29/2013 07:42 AM)
												Commvault Systems 2Q Adj. EPS, Revenue Tops Ests. (Bloomberg First Word - Bloomberg, 10/29/2013 07:47 AM)
												U.S. TMT Pre-Mkt: AAPL GM View Misses; LNKD, YELP to Report (Bloomberg First Word - Bloomberg, 10/29/2013 07:54 AM)
												U.S. PRE-MARKET MOVERS: AAMRQ CIE CLNY DATA GT LYB NTRI SLG USAT (Bloomberg First Word - Bloomberg, 10/29/2013 08:49 AM)
												U.S. EQUITY MOVERS: CGNX CMI DAN DCO DIN ECOL ECOM GEOS JLL LMOS (Bloomberg First Word - Bloomberg, 10/29/2013 10:00 AM)
												$\label{loomberg} \mbox{U.S. Stock Options With Biggest Changes in Implied Volatility} \mbox{ (BLOOMBERG News-Bloomberg, } 10/29/2013 11:30 \mbox{ AM)}$
												Elevated Options Volume: AFL AMKR AMLP AON ASH BIDU BYI CAR CBOE (Bloomberg First Word - Bloomberg, 10/29/2013 04:31 PM)
	10/30/2013 Wed	1,256,498	\$78.10	-2.99%	-0.54%	-0.14%	-1.05%	-1.94%	-\$1.56	-1.31	19.31%	CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 10/30/2013)
												CommVault racks up sales gain (Investor's Business Daily - Factiva, 10/30/2013)
												Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/30/2013)
												FORM 8-K: COMMVAULT SYSTEMS FILES CURRENT REPORT (US Fed News - Factiva, 10/30/2013)
												JMP Securities Analyst Report (Analyst Report - Manual Entry, 10/30/2013)

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[1]	[2]	[3]	[4]	[5] Market	[6] Industry Excess	[7] Predicted	[8]	[9] Abnormal Price	[10]	[11]	[12]
Date	Volume	Price	Return			Return	Return	React	t-stat	p-Value	Events
											Needham & Company Analyst Report (Analyst Report - Manual Entry, 10/30/2013)
											$\label{thm:commvault} \textbf{USFedNewsService: US Patent Issued to CommVault Systems on Oct. 29 for "Systems and methods for performing data replication" (RE1 - Bloomberg, $10/30/2013 06:32 AM)$}$
											USFedNewsService: US Patent Issued to CommVault Systems on Oct. 29 for "Systems and methods for retaining and using data block (RE1 - Bloomberg, 10/30/2013 10:53 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Oct. 29 for "Systems and methods for granular resource management in (RE1 - Bloomberg, 10/30/2013 12:02 PM)
											USFedNewsService: US Patent Issued to CommVault Systems on Oct. 29 for "Firewall proxy systems and methods in a backup (RE1 - Bloomberg, 10/30/2013 12:16 PM)
											Target Price Reached for CommVault Systems Inc (Recognia Alert Wire - Bloomberg, 10/30/2013 04:04 PM)
10/31/2013 Thu	838,072	\$78.08	-0.03%	-0.27%	-0.13%	-0.70%	0.67%	\$0.52	0.45	65.50%	COMMVAULT SYSTEMS INC 10-Q (SEC - SEC Edgar, 10/31/2013)
											COMMVAULT SYSTEMS INC S-8 (SEC - SEC Edgar, 10/31/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 10/31/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Oct. 16, 2013) (Computer Weekly News - Factiva, 10/31/2013)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 10/31/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 10/31/2013)
11/1/2013 Fri	932,936	\$77.96	-0.15%	0.06%	-0.49%	-0.66%	0.50%	\$0.39	0.34	73.62%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 11/01/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 11/01/2013)
11/2/2013 Sat 11/3/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 11/03/2013)
11/3/2013 Sun											US Patent Issued to CommVault Systems on Oct. 29 for "Firewall proxy systems and methods
											in a backup environment" (New Jersey Inventor) (US Fed News - Factiva, 11/03/2013)
11/4/2013 Mon	643,628	\$77.74	-0.28%	0.37%	0.33%	0.76%	-1.05%	-\$0.82	-0.7	48.38%	Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 11/04/2013)
											Sadif Analytics Analyst Report (Analyst Report - Manual Entry, 11/04/2013)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											Summit Research Analyst Report (Analyst Report - Manual Entry, 11/04/2013)
											$\label{eq:Quarterly Financial Results, Product Availability and Enhancements and Upcoming Earnings \\ \textbf{Schedules - Research Report on } (PR\ Newswire - Bloomberg, 11/04/2013\ 08:01\ AM)$
											Quarterly Financial Results, Product Availability and Enhancements and Upcoming Earnings Schedules - Research Report on CommVault, AVG, Splunk, SolarWinds, and LifeLock (PR Newswire (U.S.) - Factiva, 11/04/2013 08:02 AM)
11/5/2013 Tue	627,908	\$76.58	-1.49%	0.11%	-0.72%	-0.85%	-0.64%	-\$0.50	-0.43	66.79%	CommVault Systems, Inc. Patent Issued for Hierarchical Systems and Methods for Performing Data Storage Operations (Information Technology Newsweekly - Factiva, 11/05/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 11/05/2013)
											COMMVAULT SYSTEMS INC: BUNTE ALAN G FILES TO SELL 30,000 SHARES (Washington Service - Bloomberg, 11/05/2013 10:37 PM)
11/6/2013 Wed	646,576	\$76.90	0.42%	-0.15%	0.96%	0.80%	-0.38%	-\$0.29	-0.26	79.83%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 11/06/2013)
											CommVault Systems, Inc. Patent Issued for Hierarchical Systems and Methods for Performing Data Storage Operations (Journal of Engineering - Factiva, 11/06/2013)
											Eva Dimensions Analyst Report (Analyst Report - Manual Entry, 11/06/2013)
											CommVault Systems Q2 net income increases (MarketLine (a Datamonitor Company), Company News - Factiva, 11/06/2013 01:59 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Nov. 5 for "Systems and methods for retaining and using data block (RE1 - Bloomberg, 11/06/2013 08:21 AM)
											thm:usfedNewsService: US Patent Issued to CommVault Systems on Nov.5 for "Content aligned block-based deduplication" (New Jersey (RE1 - Bloomberg, \$11/06/2013 09:41 AM)\$
											USFedNewsService: US Patent Issued to CommVault Systems on Nov. 5 for "Block-level single instancing" (New Jersey Inventors) (RE1 - Bloomberg, 11/06/2013 09:55 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Nov. 5 for "Systems and methods for performing storage operations (RE1 - Bloomberg, 11/06/2013 11:39 AM)
											ARMANDO GEDAY, Director, SELLS 833 ON 11/4/13 OF CVLT (Washington Service - Bloomberg, 11/06/2013 04:08 PM)
											COMMVAULT SYSTEMS INC: GEDAY ARMANDO FILES TO SELL 833 SHARES (Washington Service - Bloomberg, 11/06/2013 10:27 PM)

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Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
				Market	Industry Excess	Predicted	Abnormal	Abnormal Price			
Date	Volume	Price	Return	Return		Return	Return	React	t-stat	p-Value	Events
											Example 2 Year Insider History: Dir Sells CVLT-COMMVAULT SYSTEMS (Washington Service - Bloomberg, 11/06/2013 10:31 PM)
11/7/2013 Thu	745,630	\$75.53	-1.78%	-1.89%	0.80%	-1.81%	0.03%	\$0.02	0.02	98.59%	CommVault Systems, Inc. Patent Issued for Hierarchical Systems and Methods for Performing
11/8/2013 Fri	476,744	\$75.76	0.30%	1.61%	-0.73%	1.19%	-0.89%	-\$0.67	-0.6	55.25%	Globaldata Analyst Report (Analyst Report - Manual Entry, 11/08/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 11/08/2013)
11/9/2013 Sat 11/10/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 11/10/2013)
11/11/2013 Mon 11/12/2013 Tue	410,508 342,656				0.32% 0.01%	0.27% -0.06%	-1.26% 0.17%	-\$0.95 \$0.13		39.85% 90.34%	CommVault Systems, Inc. Patent Issued for Systems and Methods for Retaining and Using Data Block Signatures in Data Protection Operations (Information Technology Newsweekly Factiva, 11/12/2013)
											Fort Monmouth redevelopment plans changing with the economy (Asbury Park Press - Factiva, $11/12/2013$)
11/13/2013 Wed	382,899	\$76.51	1.89%	1.17%	-0.21%	1.20%	0.69%	\$0.52	0.52	60.60%	CommVault Systems, Inc. Patent Issued for Firewall Proxy Systems and Methods in a Backup Environment (Journal of Engineering - Factiva, 11/13/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Granular Resource Management in a Storage Network (Journal of Engineering - Factiva, 11/13/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Retaining and Using Data Block Signatures in Data Protection Operations (Journal of Engineering - Factiva, 11/13/2013)
											FORT MONMOUTH REDEVELOPMENT; Plans modified by market shift (Asbury Park Press - Factiva, 11/13/2013)
											Fort Monmouth's redevelopment plan changing with the economy (Courier News - Factiva, $11/13/2013$)
											Fort Monmouth's redevelopment plans changing with the economy (Home News Tribune - Factiva, $11/13/2013$)
											Gartner Names CommVault a Leader in its Magic Quadrant for Enterprise Information Archiving (PR Newswire (U.S.) - Factiva, 11/13/2013 08:30 AM)
											Gartner Names CommVault a Leader in its Magic Quadrant for Enterprise Information Archiving (PR Newswire - Bloomberg, 11/13/2013 08:30 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Nov. 12 for "System and method for performing integrated storage (RE1 - Bloomberg, 11/13/2013 10:54 AM)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess		Abnormal Return	Price React	t-stat	p-Value	Events
											CORRECTING and REPLACING STORServer Expands Market Reach, Builds Backup Appliances Powered by CommVault Simpana Software (Business Wire - Bloomberg, 11/13/2013 04:17 PM)
											CORRECTING and REPLACING: STORServer Expands Market Reach, Builds Backup Appliances Powered by CommVault Simpana Software (Business Wire - Factiva, 11/13/2013 04:17 PM)
11/14/2013 Thu	514,301	\$76.75	0.31%	0.20%	-0.16%	0.00%	0.32%	\$0.24	0.24	81.07%	CommVault Systems, Inc. Patent Issued for Systems and Methods for Granular Resource Management in a Storage Network (Computer Weekly News - Factiva, 11/14/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Retaining and Using Data Block Signatures in Data Protection Operations (Computer Weekly News - Factiva, 11/14/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Oct. 25, 2013) (Computer Weekly News - Factiva, 11/14/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 8-K, Current Report (Oct. 29, 2013) (Computer Weekly News - Factiva, 11/14/2013)
11/15/2013 Fri	527,827	\$77.69	1.22%	0.33%	-0.06%	0.26%	0.97%	\$0.74	0.73	46.57%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 11/15/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 11/15/2013)
11/16/2013 Sat 11/17/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 11/17/2013)
											Wright Investors Service Analyst Report (Analyst Report - Manual Entry, 11/17/2013)
11/18/2013 Mon	582,338	\$77.00	-0.89%	-0.93%	0.74%	-0.64%	-0.25%	-\$0.20	-0.19	84.92%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 11/18/2013)
											Oppenheimer's Carter Worth Lists Buys, Sells (Bloomberg First Word - Bloomberg, 11/18/2013 09:46 AM)
											ARMANDO GEDAY, Director, SELLS 4,833 ON 11/14/13 OF CVLT (Washington Service - Bloomberg, 11/18/2013 04:34 PM)
11/19/2013 Tue	455,718	\$75.02	-2.57%	-0.40%	-0.57%	-1.12%	-1.45%	-\$1.11	-1.1	27.42%	CommVault Systems, Inc. Patent Issued for Systems and Methods for Retaining and Using Data Block Signatures in Data Protection Operations (Information Technology Newsweekly - Factiva, 11/19/2013)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											COMMVAULT SYSTEMS INC: GEDAY ARMANDO FILES TO SELL 4,833 SHARES (Washington Service - Bloomberg, 11/19/2013 10:34 PM)
11/20/2013 Wed	382,282	\$75.19	0.23%	-0.25%	0.47%	-0.02%	0.25%	\$0.18	0.19	85.27%	CommVault Systems, Inc. Patent Issued for Content Aligned Block-Based Deduplication (Journal of Engineering - Factiva, 11/20/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Performing Storage Operations Using Network Attached Storage (Journal of Engineering - Factiva, 11/20/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Retaining and Using Data Block Signatures in Data Protection Operations (Journal of Engineering - Factiva, 11/20/2013)
											DJ CommVault Systems Inc, Inst Holders, 3Q 2013 (CVLT) (Dow Jones Institutional News - Factiva, 11/20/2013 03:20 AM)
											$USFed News Service: \ US\ Patent\ Issued\ to\ CommVault\ Systems\ on\ Nov.\ 19\ for\ "Systems\ and\ methods\ for\ performing\ data\ replication"\ (RE1\ -\ Bloomberg,\ 11/20/2013\ 02:15\ PM)$
											$\label{thm:commval} \textbf{USFedNewsService: US\ Patent\ Issued\ to\ CommVault\ Systems\ on\ Nov.\ 19\ for\ "Information management\ systems\ and\ methods\ for\ (RE1\ -\ Bloomberg,\ 11/20/2013\ 02:42\ PM)}$
11/21/2013 Thu	229,577	\$76.58	1.85%	1.22%	0.27%	1.69%	0.15%	\$0.12	0.12	90.74%	CommVault Systems, Inc. Patent Issued for Content Aligned Block-Based Deduplication (Computer Weekly News - Factiva, 11/21/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Performing Storage Operations Using Network Attached Storage (Computer Weekly News - Factiva, 11/21/2013)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Retaining and Using Data Block Signatures in Data Protection Operations (Computer Weekly News - Factiva, 11/21/2013)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Nov. 6, 2013) (Computer Weekly News - Factiva, 11/21/2013)
											Info-Tech Research Group Names CommVault a 'Champion' in its Content and Email Archiving Vendor Landscape Report (PR Newswire (U.S.) - Factiva, 11/21/2013 08:30 AM)
											Info-Tech Research Group Names CommVault a 'Champion' in its Content and Email Archiving Vendor Landscape Report (PR Newswire - Bloomberg, 11/21/2013 08:30 AM)

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Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]		[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											CommVault Chief Operating Officer To Address Investors At Credit Suisse's 2013 Annual Technology Conference (PR Newswire (U.S.) - Factiva, 11/21/2013 09:15 AM)
											CommVault Chief Operating Officer To Address Investors At Credit Suisse's 2013 Annual Technology Conference (PR Newswire - Bloomberg, 11/21/2013 09:15 AM)
11/22/2013 Fri	290,244	\$77.00	0.55%	0.57%	0.21%	0.80%	-0.25%	-\$0.19	-0.19	85.01%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 11/22/2013)
											Stock Price Update, Conference Presentations, Appointments, and Prestigious Accolades - Research Report on Catamaran, Cadence, (PR Newswire - Bloomberg, 11/22/2013 08:00 AM)
											Stock Price Update, Conference Presentations, Appointments, and Prestigious Accolades - Research Report on Catamaran, Cadence, CommVault, Ellie Mae, and MICROS (PR Newswire (U.S.) - Factiva, 11/22/2013 08:01 AM)
11/23/2013 Sat 11/24/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 11/24/2013)
11/25/2013 Mon	611,725	\$76.46	-0.70%	0.08%	-0.33%	-0.35%	-0.35%	-\$0.27	-0.27	78.70%	*COMMVAULT SYSTEMS RATED NEW BUY AT MONNESS CRESPI HARDT, PT \$90 (Bloomberg First Word - Bloomberg, 11/25/2013 09:18 AM)
											UPDATE: Monness Crespi Hardt Initiates Coverage on CommVault Systems on Solid Simpana Upgrade Cycle and New Growth Markets (Benzinga.com - Factiva, 11/25/2013 10:22 AM)
11/26/2013 Tue	392,980	\$75.65	-1.06%	0.58%	-0.21%	0.43%	-1.49%	-\$1.14	-1.14	25.68%	CommVault Systems, Inc. Patent Issued for System and Method for Performing Integrated
11/27/2013 Wed	505,190	\$74.90	-0.99%	0.69%	-0.26%	0.48%	-1.47%	-\$1.11	-1.13	26.29%	CommVault Systems, Inc. Patent Issued for System and Method for Performing Integrated Storage Operations (Journal of Engineering - Factiva, 11/27/2013)
											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 11/27/2013)
											USFedNewsService: US Patent Issued to CommVault Systems on Nov. 26 for "Systems and methods for performing data management (RE1 - Bloomberg, 11/27/2013 08:32 AM)
11/28/2013 Thu											CommVault Systems, Inc. Patent Issued for System and Method for Performing Integrated
11/29/2013 Fri	196,528	\$74.85	-0.07%	0.37%	-0.60%	-0.32%	0.25%	\$0.19	0.19	84.85%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
11/30/2013 Sat 12/1/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 12/01/2013)
12/2/2013 Mon	367,643	\$73.67	-1.58%	-0.36%	-0.19%	-0.84%	-0.73%	-\$0.55	-0.57	57.29%	Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry,

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Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry		[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Return	Abnormal Return	Price React	t-stat	p-Value	Events
12/3/2013 Tue	480,314	\$72.58	-1.48%	-0.20%	0.21%	-0.26%	-1.22%	-\$0.90	-0.95	34.57%	CommVault Systems, Inc. Patent Issued for Information Management Systems and Methods for Heterogeneous Data Sources (Information Technology Newsweekly - Factiva, 12/03/2013)
											Oppenheimer & Co. Inc. Analyst Report (Analyst Report - Manual Entry, 12/03/2013)
12/4/2013 Wed	737,740	\$70.69	-2.60%	0.03%	0.66%	0.48%	-3.08%	-\$2.24	-2.39	1.86% *	BMO Capital Markets Analyst Report (Analyst Report - Manual Entry, 12/04/2013)
											CommVault at Credit Suisse Technology Conference - Final (CQ FD Disclosure - Factiva, 12/04/2013)
											CommVault Systems, Inc. Patent Issued for Information Management Systems and Methods for Heterogeneous Data Sources (Journal of Engineering - Factiva, 12/04/2013)
											*COMMVAULT SYSTEMS RATED NEW PERFORM AT OPPENHEIMER (Bloomberg First Word - Bloomberg, 12/04/2013 04:59 AM)
											U.S. DAYBOOK: Fed's Beige Book; Brown-Forman, Avago Earnings (Bloomberg First Word - Bloomberg, 12/04/2013 05:30 AM)
											UPDATE: Oppenheimer Initiates Coverage on CommVault Systems on Near-Term Potential Headwinds (Benzinga.com - Factiva, 12/04/2013 07:55 AM)
											U.S. TMT Pre-Mkt: OVTI View Misses; Morgan Stanley Cuts ACN, TDC (Bloomberg First Word - Bloomberg, 12/04/2013 08:22 AM)
											Free Trial of CommVault Edge Solution Offers Comprehensive, Secure Data Management and Access for the Mobile Enterprise Workforce (PR Newswire (U.S.) - Factiva, 12/04/2013 08:30 AM)
											Free Trial of CommVault Edge Solution Offers Comprehensive, Secure Data Management and Access for the Mobile Enterprise (PR Newswire - Bloomberg, 12/04/2013 08:30 AM)
											BMO Starts Coverage of Software Cos.; CVLT, RHT, ORCL Rated Buy (Bloomberg First Word - Bloomberg, 12/04/2013 04:41 PM)
12/5/2013 Thu	884,154	\$73.64	4.17%	-0.12%	0.14%	-0.31%	4.48%	\$3.17	3.45	0.08% **	S&P Global Compustat Company Analysis Analyst Report (Analyst Report - Manual Entry, $12/05/2013$)
											UPDATE: BMO Capital Markets Initiates Coverage On CommValut On Simpana 10.0 Product Cycle (Benzinga.com - Factiva, 12/05/2013 07:46 AM)
											U.S. TMT Pre-Mkt: AVGO 4Q Beats; SNPS View Misses; FNSR Reports (Bloomberg First

Word - Bloomberg, 12/05/2013 07:49 AM)

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Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											U.S. PRE-MARKET MOVERS: AGNC ARO CALI CLDX CONN EQIX FRAN GGP (Bloomberg First Word - Bloomberg, 12/05/2013 08:52 AM)
											U.S. WRAP: Stocks Drop a Fifth Day on Bets Fed Will Taper (Bloomberg First Word - Bloomberg, 12/05/2013 04:25 PM)
12/6/2013 Fri	491,957	\$73.29	-0.48%	0.73%	0.25%	0.95%	-1.42%	-\$1.05	-1.04	29.87%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
12/7/2013 Sat 12/8/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 12/08/2013)
12/9/2013 Mon	567.070	\$72.74	-0.75%	0.15%	-0.12%	-0.19%	-0.56%	-\$0.41	-0.41	68.16%	Oil Explorers Pioneer, Newfield 'Reaction' Buys: Oppenheimer (Bloomberg First
12/10/2013 Tue	*			-0.20%		-0.51%	-1.43%	-\$1.04		29.31%	CommVault Systems, Inc. "System and Method for Providing Encryption in Storage Operations in a Storage Network, Such as for Use by Application Service Providers That Provide Data Storage Services" in Patent Application Appro (Information Technology
12/11/2013 Wed	522,945	\$69.58	-2.45%	-1.39%	-0.30%	-2.45%	-0.01%	-\$0.01	-0.01	99.53%	Globaldata Analyst Report (Analyst Report - Manual Entry, 12/11/2013)
12/12/2013 Thu	977,748	\$67.23	-3.38%	-0.13%	-0.04%	-0.55%	-2.83%	-\$1.97	-2.13	3.52% *	CommVault Systems, Inc. "System and Method for Providing Encryption in Storage Operations in a Storage Network, Such as for Use by Application Service Providers That Provide Data Storage Services" in Patent Application Appro (Computer Weekly News - Factiva, 12/12/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 12/12/2013)
12/13/2013 Fri	660,476	\$67.17	-0.09%	0.07%	1.17%	0.89%	-0.98%	-\$0.66	-0.73	46.74%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
12/14/2013 Sat 12/15/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 12/15/2013)
											CommVault Sell-Off Overdone, Checks Remain Positive: Stifel (Bloomberg First Word - Bloomberg, 12/15/2013 04:48 PM)
12/16/2013 Mon	795,869	\$68.23	1.58%	0.71%	0.48%	1.08%	0.50%	\$0.34	0.37	71.08%	U.S. TMT Pre-Mkt: S Reported to Mull TMUS Bid; TWTR Downgrades (Bloomberg Firs Word - Bloomberg, 12/16/2013 07:43 AM)
											U.S. PRE-MARKET MOVERS: ACRX AER AGEN AIG AMD ASX CBST CRUS EVGN (Bloomberg First Word - Bloomberg, 12/16/2013 08:38 AM)
12/17/2013 Tue	2,020,755	\$73.74	8.08%	-0.14%	-0.11%	-0.69%	8.77%	\$5.98	6.53	0.00% **	BMO Capital Markets Analyst Report (Analyst Report - Manual Entry, 12/17/2013)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 12/17/2013)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 12/17/2013)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											CommVault Gains; Piper Says On Track to Meet FY14 Outlook (Bloomberg First Word - Bloomberg, 12/17/2013 10:21 AM)
											Top 10 Nasdaq-traded stocks posting largest percentage increases (Associated Press Newswires - Factiva, 12/17/2013 01:30 PM)
											U.S. WRAP: Stocks Decline Ahead of Fed Decision (Bloomberg First Word - Bloomberg, 12/17/2013 04:24 PM)
											Shares of CommVault Spike Following Piper Jaffray's Comments (Benzinga.com - Factiva, 12/17/2013 04:37 PM)
12/18/2013 Wed	958,963	\$73.84	0.14%	1.15%	0.13%	1.38%	-1.25%	-\$0.92	-0.8	42.71%	RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 12/18/2013)
											USFedNewsService: US Patent Issued to CommVault Systems on Dec. 17 for "Systems and methods for classifying and transferring (RE1 - Bloomberg, 12/18/2013 07:29 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Dec. 17 for "Performing data storage operations in a cloud storage (RE1 - Bloomberg, 12/18/2013 07:59 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Dec. 17 for "System and method for archiving objects in an (RE1 - Bloomberg, 12/18/2013 08:09 AM)
12/19/2013 Thu	469,212	\$72.94	-1.22%	-0.29%	-0.20%	-0.84%	-0.37%	-\$0.28	-0.25	80.54%	Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 12/19/2013)
											CommVault and Hitachi Data Systems Bring Industry's Most Advanced Data Protection, Availability and Recovery to Global Enterprises and Systems Integrators (PR Newswire (U.S.) - Factiva, 12/19/2013 04:30 PM)
											CommVault and Hitachi Data Systems Bring Industry's Most Advanced Data Protection, Availability and Recovery to Global (PR Newswire - Bloomberg, 12/19/2013 04:30 PM)
											*COMMVAULT AND HITACHI DATA EXPAND OEM PACT :CVLT US (BLOOMBERG News - Bloomberg, 12/19/2013 04:33 PM)
12/20/2013 Fri	1,477,751	\$75.96	4.13%	1.15%	-0.10%	1.16%	2.97%	\$2.17	1.96	5.26%	Colorado Springs data protection firm hopes new deal will double its business (The Gazette - Factiva, $12/20/2013$)
											$ \hbox{\bf Colorado Springs data protection firm hopes new deal will double its business} \ (The \ Gazette \ (MCT) - Factiva, 12/20/2013) $
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 12/20/2013)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 12/20/2013)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 12/20/2013)
12/21/2013 Sat											US Patent Issued to CommVault Systems on Dec. 17 for "Systems and methods for classifying and transferring information in a storage network" (American, Indian Inventors) (US Fed News - Factiva, 12/21/2013)
											USFedNewsService: WIPO PUBLISHES PATENT OF COMMVAULT SYSTEMS FOR "CLIENT-SIDE SIGNATURE REPOSITORY IN A NETWORKED STORAGE SYSTEM (RE1 - Bloomberg, 12/21/2013 03:42 AM)
12/22/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 12/22/2013)
12/23/2013 Mon	570,021	\$74.60	-1.78%	1.08%	-0.36%	0.89%	-2.67%	-\$2.03	-1.73	8.55%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 12/23/2013)
12/24/2013 Tue	244,691	\$74.74	0.19%	0.16%	0.21%	0.14%	0.05%	\$0.03	0.03	97.69%	CommVault Systems, Inc. "Hierarchical Systems and Methods for Performing Data Storage Operations" in Patent Application Approval Process (Information Technology Newsweekly -
12/25/2013 Wed											USFedNewsService: US Patent Issued to CommVault Systems on Dec. 24 for "Data mining systems and methods for heterogeneous data (RE1 - Bloomberg, 12/25/2013 07:52 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Dec. 24 for "Method and system for searching stored data" (American, (RE1 - Bloomberg, 12/25/2013 08:18 AM)
12/26/2013 Thu	295,174	\$74.41	-0.44%	0.28%	-0.44%	-0.33%	-0.11%	-\$0.08	-0.07	94.23%	COMMVAULT SYSTEMS REPORTS DISPOSITION BY EXECUTIVE VP BUNTE (New Jersey) (US Fed News - Factiva, 12/26/2013)
											CommVault Systems, Inc. "Hierarchical Systems and Methods for Performing Data Storage Operations" in Patent Application Approval Process (Computer Weekly News - Factiva, 12/26/2013)
12/27/2013 Fri	327,195	\$74.67	0.35%	-0.24%	0.52%	-0.07%	0.42%	\$0.31	0.27	78.47%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
12/28/2013 Sat											
12/29/2013 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 12/29/2013)
12/30/2013 Mon	364,834	\$74.48	-0.25%	-0.05%	0.46%	0.11%	-0.36%	-\$0.27	-0.24	81.35%	Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry,
12/31/2013 Tue	378,248	\$74.86	0.51%	0.54%	0.08%	0.49%	0.02%	\$0.01	0.01	98.98%	Brean Capital, LLC Analyst Report (Analyst Report - Manual Entry, 12/31/2013)
											Commvault Systems, Inc. Researchers Submit Patent Application, "Intelligent Scheduling for Remote Computers", for Approval (Information Technology Newsweekly - Factiva, 12/31/2013)
1/1/2014 Wed											CommVault Systems, Inc. Patent Issued for System and Method for Archiving Objects in an

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Appendix C
CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
1/2/2014 Thu	732,541	\$74.10	-1.02%	-0.79%	-0.16%	-1.49%	0.47%	\$0.35	0.31	75.80%	CommVault Systems, Inc. Patent Issued for System and Method for Archiving Objects in an Information Store (Computer Weekly News - Factiva, 01/02/2014)
											$\label{lem:commval} \textbf{Commvault Systems, Inc. Researchers Submit Patent Application, "Intelligent Scheduling for Remote Computers", for Approval (Computer Weekly News - Factiva, 01/02/2014)}$
											S&P Global Compustat Company Analysis Analyst Report (Analyst Report - Manual Entry, 01/02/2014)
1/3/2014 Fri	358,335	\$74.67	0.77%	-0.27%	0.72%	0.06%	0.71%	\$0.52	0.46	64.33%	COMMVAULT SYSTEMS INC UPLOAD (SEC - SEC Edgar, 01/03/2014)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 01/03/2014)
1/4/2014 Sat 1/5/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 01/05/2014)
											Wright Investors Service Analyst Report (Analyst Report - Manual Entry, 01/05/2014)
1/6/2014 Mon	585,028	\$73.74	-1.25%	-0.44%	0.02%	-0.82%	-0.42%	-\$0.31	-0.28	78.26%	CommVault Announces Earnings Release Date (PR Newswire (U.S.) - Factiva, 01/06/2014 09:25 AM)
											CommVault Announces Earnings Release Date (PR Newswire - Bloomberg, 01/06/2014 09:25 AM)
1/7/2014 Tue	585,544	\$74.29	0.75%	0.96%	0.18%	1.20%	-0.45%	-\$0.34	-0.3	76.47%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/07/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/07/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/07/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/07/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/07/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/07/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/07/2014)
											CommVault Systems, Inc. Patent Issued for Data Mining Systems and Methods for Heterogeneous Data Sources (Information Technology Newsweekly - Factiva, 01/07/2014)
											Logicom signs VAD deal with CommVault (ITP.net - Factiva, 01/07/2014)
											ALAN G BUNTE, C.O.O, SURRENDERS 3,386 ON 1/3/14 OF CVLT (Washington Service - Bloomberg, 01/07/2014 04:16 PM)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return	Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											N ROBERT HAMMER,C.O.B.,SURRENDERS 294 ON 1/3/14 OF CVLT (Washington Service - Bloomberg, 01/07/2014 04:17 PM)
											LOUIS F MICELI, Vice Pres., SURRENDERS 129 ON 1/3/14 OF CVLT (Washington Service - Bloomberg, 01/07/2014 04:18 PM)
											RONALD L MIILLER, Vice Pres., SURRENDERS 160 ON 1/3/14 OF CVLT (Washington Service - Bloomberg, 01/07/2014 04:18 PM)
											DAVID R WEST,Vice Pres.,SURRENDERS 107 ON 1/3/14 OF CVLT (Washington Service - Bloomberg, 01/07/2014 04:18 PM)
1/8/2014 Wed	589,727	\$73.91	-0.51%	0.30%	0.15%	0.28%	-0.80%	-\$0.59	-0.53	60.05%	CommVault Systems, Inc. Patent Issued for Data Mining Systems and Methods for
1/9/2014 Thu	690,539	\$71.70	-2.99%	-0.22%	-0.19%	-0.74%	-2.25%	-\$1.66	-1.49	14.00%	Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Dec. 20, 2013) (Computer Weekly News - Factiva, 01/09/2014)
											Sadif Analytics Analyst Report (Analyst Report - Manual Entry, 01/09/2014)
1/10/2014 Fri	594,995	\$71.95	0.35%	0.44%	0.00%	0.30%	0.05%	\$0.03	0.03	97.59%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
1/11/2014 Sat											The GO D C A LOD (A LOD A M. LE C 01/12/2014)
1/12/2014 Sun 1/13/2014 Mon	1 104 005	\$68.06	-A 16%	-1 47%	0.23%	-2.04%	-2.11%	-\$1.52	-1.4	16.55%	Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 01/12/2014) CommVault anchoring Fort Monmouth project (NJBIZ - Factiva, 01/13/2014)
1/13/2014 WIOII	1,104,003	\$00.70	-4.1070	-1.4//0	0.2370	-2.0470	-2.11/0	-φ1.32	-1.4	10.5570	CommVault anchoring Fort Monmouth project (NJBIZ - Factiva, 01/13/2014)
											• • • • • • • • • • • • • • • • • • • •
											Fort Monmouth: Creating a big space for big data (NJBIZ - Factiva, 01/13/2014) Macquarie Research Analyst Report (Analyst Report - Manual Entry, 01/13/2014)
											Oppenheimer's Carter Worth Lists Buys, Sells for Start of 2014 (Bloomberg First Word - Bloomberg, 01/13/2014 10:13 AM)
											NJBIZ: CommVault anchoring Fort Monmouth project (RE1 - Bloomberg, $01/13/2014$ $04:03~PM$)
											*COMMVALUT SYSTEMS RATED NEW OUTPERFORM AT MACQUARIE, PT \$90 (Bloomberg First Word - Bloomberg, 01/13/2014 08:31 PM)
1/14/2014 Tue	766,981	\$68.74	-0.32%	1.69%	-0.55%	1.56%	-1.88%	-\$1.30	-1.23	22.08%	COMMVAULT SYSTEMS INC CORRESP (SEC - SEC Edgar, 01/14/2014)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, $01/14/2014$)

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(4)	[2]	(2)	[4]	(5)	[6]	(7)					ii Daily Statistics
[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
Dave	- voianie	11100	100011	100001	11011111	- Account	- Account	Tioner	· state	рушие	U.S. PRE-MARKET MOVERS: AGEN ALNY CBMX FULL GALE GME HTCH ISRG (Bloomberg First Word - Bloomberg, 01/14/2014 09:00 AM)
1/15/2014 Wed	1,100,199	\$71.00	3.29%	0.76%	0.30%	0.99%	2.30%	\$1.58	1.52	13.02%	William Blair & Company Analyst Report (Analyst Report - Manual Entry, 01/15/2014)
1/16/2014 Thu	1,592,755	\$75.17	5.87%	0.09%	-0.01%	-0.21%	6.08%	\$4.32	4	0.01% **	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/16/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/16/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/16/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/16/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/16/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/16/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 01/16/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 01/16/2014)
											*COMMVAULT UP 6.2% IN ACTIVE TRADING, RISES ABOVE 50-DMA (Bloomberg First Word - Bloomberg, 01/16/2014 10:29 AM)
											U.S. EQUITY MOVERS: AFOP AGIO APPY BPTH CLIR CNTO CTRL DECK DSNY (Bloomberg First Word - Bloomberg, 01/16/2014 12:01 PM)
											CommVault Gains; William Blair Expects FY3Q to Beat Ests. (Bloomberg First Word - Bloomberg, 01/16/2014 12:09 PM)
											Elevated Options Volume: ALGN ALLT ANR CBS CEC COP CVLT CYBX DF (Bloomberg First Word - Bloomberg, 01/16/2014 02:08 PM)
											LOUIS F MICELI, Vice Pres., SURRENDERS 937 FROM 1/14/14-1/15/14 OF (Washington Service - Bloomberg, 01/16/2014 05:12 PM)
											BRIAN CAROLAN,C.F.O.,SURRENDERS 903 FROM 1/14/14-1/15/14 OF CVLT (Washington Service - Bloomberg, 01/16/2014 05:14 PM)
											N ROBERT HAMMER, C.O.B., SURRENDERS 1,819 FROM 1/14/14-1/15/14 OF (Washington Service - Bloomberg, 01/16/2014 05:15 PM)
											RONALD L MIILLER, Vice Pres., SURRENDERS 1,185 FROM 1/14/14-1/15/1 (Washington Service - Bloomberg, 01/16/2014 05:17 PM)
											DAVID R WEST,Vice Pres.,SURRENDERS 739 FROM 1/14/14-1/15/14 OF C (Washington Service - Bloomberg, 01/16/2014 05:18 PM)

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Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											GARY MERRILL,Officer,SURRENDERS 332 FROM 1/14/14-1/15/14 OF CVLT (Washington Service - Bloomberg, 01/16/2014 05:19 PM)
											ALAN G BUNTE, C.O.O, SURRENDERS 1,435 FROM 1/14/14-1/15/14 OF CVLT (Washington Service - Bloomberg, 01/16/2014 05:22 PM)
1/17/2014 Fri	584,608	\$74.97	-0.27%	-0.50%	-0.04%	-1.00%	0.73%	\$0.55	0.45	65.18%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
1/18/2014 Sat 1/19/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 01/19/2014)
1/20/2014 Mon											Summit Research Analyst Report (Analyst Report - Manual Entry, 01/20/2014)
1/21/2014 Tue 1/22/2014 Wed	659,573 384,576				-0.48% -0.33%	0.20% 0.00%	0.82% -0.96%	\$0.61 -\$0.73		61.59% 55.29%	
1/23/2014 Thu	678,380	\$75.97	1.29%	-0.57%	0.18%	-0.84%	2.13%	\$1.60	1.33	18.78%	Commvault Systems, Inc. Patent Application Titled "Storage of Application Specific Profiles Correlating to Document Versions" Published Online (Computer Weekly News - Factiva, 01/23/2014)
											Commvault Systems, Inc. Patent Application Titled "Storage of Application Specific Profiles Correlating to Document Versions" Published Online (Politics & Government Week - Factiva, 01/23/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Jan. 7, 2014) (Computer Weekly News - Factiva, 01/23/2014)
1/24/2014 Fri 1/25/2014 Sat	929,600	\$73.93	-2.69%	-2.15%	-0.23%	-3.38%	0.69%	\$0.52	0.43	67.09%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
1/26/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 01/26/2014)
1/27/2014 Mon	715,600	\$72.43	-2.03%	-1.08%	-0.39%	-2.07%	0.04%	\$0.03	0.02	98.23%	COMMVAULT SYSTEMS INC SC 13G (SEC - SEC Edgar, 01/27/2014)
											COMMVAULT SYSTEMS INC UPLOAD (SEC - SEC Edgar, 01/27/2014)
1/28/2014 Tue	1,382,039	\$76.10	5.07%	0.35%	0.43%	0.71%	4.35%	\$3.15	2.68	0.83% **	COMMVAULT SYSTEMS INC SC 13G/A (SEC - SEC Edgar, 01/28/2014)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 01/28/2014)
											U.S. WRAP: Stocks Climb After Consumer Confidence, Earnings (Bloomberg First Word - Bloomberg, 01/28/2014 04:29 PM)
1/29/2014 Wed	5,441,791	\$69.44	-8.75%	-1.13%	-0.13%	-1.93%	-6.82%	-\$5.19	-4.14	0.01% **	BMO Capital Markets Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											CFRA Equity Research Analyst Report (Analyst Report - Manual Entry, 01/29/2014)

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Appendix C CommVault News Chronology with Daily Statistics

							CommVa	ult News	Chron	ology wit	h Daily Statistics
[1]	[2]	[3]	[4]		[6] Industry Excess		[8] Abnormal	[9] Abnormal Price	[10]	[11]	[12]
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events
											COMMVAULT SYSTEMS INC 8-K (SEC - SEC Edgar, 01/29/2014)
											CommVault Systems Inc reaffirms FY 2014 guidance-conference call (Reuters Significant Developments - Factiva, 01/29/2014)
											Event Brief of Q3 2014 CommVault Earnings Conference Call - Final (CQ FD Disclosure - Factiva, 01/29/2014)
											Jefferies & Company Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											JMP Securities Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Lake Street Capital Markets, LLC Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Macquarie Research Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Needham & Company Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Oppenheimer & Co. Inc. Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Raymond James & Associates Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Sterne Agee & Leach Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Stocks Extend Losses After Fed Trims Bond Purchases (Investor's Business Daily - Factiva, 01/29/2014)
											Summit Research Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											William Blair & Company Analyst Report (Analyst Report - Manual Entry, 01/29/2014)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 01/29/2014)

U.S. TMT PRE-MKT: EMC Forecasts Miss; FB, QCOM to Report (Bloomberg First Word -

Bloomberg, 01/29/2014 07:38 AM)

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Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
					•		Abnormal				
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events

CommVault Announces Third Quarter Fiscal 2014 Financial Results (PR Newswire (U.S.) - Factiva, 01/29/2014 07:40 AM)

*COMMVAULT SYSTEMS 3Q EPS 35C :CVLT US (BLOOMBERG News - Bloomberg, 01/29/2014 07:40 AM)

*COMMVAULT SYSTEMS 3Q NON-GAAP EPS 54C :CVLT US (BLOOMBERG News - Bloomberg, 01/29/2014 07:40 AM)

*COMMVAULT SYSTEMS 3Q REV. \$153.3M :CVLT US (BLOOMBERG News - Bloomberg, 01/29/2014 07:40 AM)

*COMMVAULT SYSTEMS 3Q REV. UP 20% :CVLT US (BLOOMBERG News - Bloomberg, 01/29/2014 07:40 AM)

*COMMVAULT SYSTEMS 3Q SERVICE REV. \$74.0M :CVLT US (BLOOMBERG News - Bloomberg, 01/29/2014 07:40 AM)

*COMMVAULT SYSTEMS 3Q SOFTWARE LICENSES REV. \$79.2M :CVLT US (BLOOMBERG News - Bloomberg, 01/29/2014 07:40 AM)

CommVault Announces Third Quarter Fiscal 2014 Financial Results (PR Newswire - Bloomberg, 01/29/2014 07:40 AM)

*COMMVAULT 3Q REV. \$ 153.3M, EST. \$149.0M (BLOOMBERG News - Bloomberg, 01/29/2014 07:40 AM)

*COMMVAULT 3Q ADJ. EPS 54C, EST. 44C (Bloomberg First Word - Bloomberg, 01/29/2014 07:40 AM)

CommVault Systems 3Q Adj. EPS, Rev. Beat Ests. (Bloomberg First Word - Bloomberg, 01/29/2014 07:45 AM)

*COMMVAULT SYSTEMS 3Q EARNINGS CONFERENCE CALL BEGINS (BLOOMBERG News - Bloomberg, 01/29/2014 08:31 AM)

*COMMVAULT SEES GLOBAL MARKET CONDITIONS IMPROVING (BLOOMBERG News - Bloomberg, 01/29/2014 08:36 AM)

*COMMVAULT: CONTINUES TO HAVE QUARTERLY REV., EARNINGS RISK (BLOOMBERG News - Bloomberg, 01/29/2014 08:37 AM)

*COMMVAULT SEES SOLID DOUBLE-DIGIT REV., EBIT GROWTH IN '15 (BLOOMBERG News - Bloomberg, 01/29/2014 08:39 AM)

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										<i>0</i> ,	•
[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return		Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											*COMMVAULT: WILL INCREASE SPENDING TO MAINTAIN MARKET EDGE (BLOOMBERG News - Bloomberg, 01/29/2014 08:39 AM)
											*COMMVAULT SAYS WILL CONTINUE TO DISENGAGE FROM DELL (BLOOMBERG News - Bloomberg, $01/29/2014$ 08:45 AM)
											U.S. PRE-MARKET MOVERS: ASTC AUDC BA BID BJRI CRUS CVLT DOW EMC (Bloomberg First Word - Bloomberg, 01/29/2014 08:46 AM)
											*COMMVAULT SAYS WILL INCREASE HIRING IN 4Q (BLOOMBERG News - Bloomberg, $01/29/2014$ 08:46 AM)
											*COMMVAULT: INCREASED HIRING MAY IMPACT S-T MARGINS (BLOOMBERG News - Bloomberg, 01/29/2014 08:47 AM)
											*COMMVAULT SEES FY15 OP MARGIN IMPROVEMENT MUTED ON EXPENSES (BLOOMBERG News - Bloomberg, 01/29/2014 08:49 AM)
											$ \begin{tabular}{ll} \textbf{CommVault Shrs Drop; Sees Qtrly Rev., Earnings Risk} & \textbf{(Bloomberg First Word - Bloomberg, } \\ 01/29/2014 & 08:49 & \textbf{AM)} \end{tabular} $
											CommVault: Increased Hiring May Impact S-T Margins (Bloomberg First Word - Bloomberg, 01/29/2014 08:51 AM)
											*COMMVAULT SAYS INCREASING MARKET SHARE IN CLOUD (BLOOMBERG News - Bloomberg, 01/29/2014 08:55 AM)
											U.S. EQUITY MOVERS: ASTC AUDC BA BBOX BSFT CRUS CTRL CVGI CVLT (Bloomberg First Word - Bloomberg, 01/29/2014 10:05 AM)
											Stocks Hitting 52-Week Lows (Benzinga.com - Factiva, 01/29/2014 10:16 AM)
											CommVault Falls as Much as 17%, Most Since 2011; RSI Hits 35 (Bloomberg First Word - Bloomberg, 01/29/2014 10:27 AM)
											$\label{loomberg} \mbox{U.S. Stock Options With Biggest Changes in Implied Volatility} \mbox{ (BLOOMBERG News-Bloomberg, } 01/29/2014 11:30\mbox{ AM)}$
											Elevated Options Volume: ACE ALTR BA BEAM BID CFN CL CPN CVLT (Bloomberg First Word - Bloomberg, 01/29/2014 02:37 PM)
											CORRECT: U.S. WRAP: Stocks Fall, Stay Down After FOMC Statement (Bloomberg First Word - Bloomberg, 01/29/2014 06:31 PM)
1/30/2014 Thu	1,743,970	\$71.24	2.59%	1.77%	0.89%	3.37%	-0.77%	-\$0.54	-0.47	64.03%	CommVault drops on outlook (Investor's Business Daily - Factiva, 01/30/2014)

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[1]	[2]	[3]	[4]	[5]	[6] Industry		[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											COMMVAULT SYSTEMS INC SC 13G (SEC - SEC Edgar, 01/30/2014)
											CommVault Systems, Inc. Patent Application Titled "Systems and Methods for Granular Resource Management in a Storage Network" Published Online (Computer Weekly News - Factiva, 01/30/2014)
											CommVault Systems, Inc. Patent Application Titled "Systems and Methods for Granular Resource Management in a Storage Network" Published Online (Politics & Government Week - Factiva, 01/30/2014)
											Credit Suisse Analyst Report (Analyst Report - Manual Entry, 01/30/2014)
											FORM 8-K: COMMVAULT SYSTEMS FILES CURRENT REPORT (US Fed News - Factiva, 01/30/2014)
											Globaldata Analyst Report (Analyst Report - Manual Entry, 01/30/2014)
											Sterne Agee & Leach Analyst Report (Analyst Report - Manual Entry, 01/30/2014)
											CommVault Announces Participation In Upcoming Investor Conferences (PR Newswire (U.S.) - Factiva, 01/30/2014 09:00 AM)
											$local commVault Announces Participation In Upcoming Investor Conferences (PR \ Newswire - Bloomberg, 01/30/2014\ 09:00\ AM)$
1/31/2014 Fri	826,648	\$69.07	-3.05%	-0.46%	-0.77%	-1.81%	-1.23%	-\$0.88	-0.75	45.53%	Alan G. Bunte brings three bagger value to CommVault Systems (News Bites - People in Business - Factiva, 01/31/2014)
											COMMVAULT SYSTEMS INC 10-Q (SEC - SEC Edgar, 01/31/2014)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, $01/31/2014$)
2/1/2014 Sat 2/2/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 02/02/2014)
2/3/2014 Mon	1,763,042	\$64.76	-6.24%	-2.61%	-1.04%	-5.17%	-1.07%	-\$0.74	-0.65	51.88%	COMMVAULT SYSTEMS INC 8-K (SEC - SEC Edgar, 02/03/2014)
											Sadif Analytics Analyst Report (Analyst Report - Manual Entry, 02/03/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 02/03/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 02/03/2014)
											CommVault Systems Files 8K - Changes Exec Mgmt >CVLT (Dow Jones Institutional News - Factiva, 02/03/2014 05:01 PM)
2/4/2014 Tue	1,767,293	\$64.16	-0.93%	0.87%	-0.06%	0.93%	-1.85%	-\$1.20	-1.12	26.44%	FORM 8-K: COMMVAULT SYSTEMS FILES CURRENT REPORT (US Fed News -

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Appendix C
CommVault News Chronology with Daily Statistics

				7.5	10						ii Daily Statistics
[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
ъ.	*7 *	ъ.	ъ.				Abnormal	Price		*7.	ъ.
Date	Volume					Return	Return	React	t-stat	p-Value	Events
2/5/2014 Wed				-0.47%		-0.20%	0.32%	\$0.21		84.52%	USFedNewsService: US Patent Issued to CommVault Systems on Feb. 4 for "System and
2/6/2014 Thu	748,976	\$65.39	1.79%	1.19%	-0.74%	0.42%	1.37%	\$0.88	0.83	41.05%	CEO N. Robert Hammer welcomes 8.0% CommVault Systems quarterly revenue rise (News Bites - People in Business - Factiva, 02/06/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Jan. 16, 2014) (Computer Weekly News - Factiva, 02/06/2014)
											S&P Global Compustat Company Analysis Analyst Report (Analyst Report - Manual Entry, 02/06/2014)
2/7/2014 Fri	992,509	\$66.52	1.73%	1.69%	-0.11%	2.02%	-0.30%	-\$0.19	-0.18	85.88%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
2/8/2014 Sat 2/9/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 02/09/2014)
2/10/2014 Mon	1,195,413	\$67.85	2.00%	0.54%	-0.38%	0.04%	1.96%	\$1.30	1.18	24.13%	COMMVAULT SYSTEMS INC SC 13G/A (SEC - SEC Edgar, 02/10/2014)
											JMP Securities Analyst Report (Analyst Report - Manual Entry, 02/10/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 02/10/2014)
											$ \begin{tabular}{ll} \textbf{CommVault Systems Raised at JMP Securities} & (BLOOMBERG News-Bloomberg, $02/10/2014\ 01:31\ AM) \end{tabular} $
											*COMMVAULT SYSTEMS RAISED TO MARKET OUTPERFORM AT JMP SECURITIES (Bloomberg First Word - Bloomberg, 02/10/2014 05:03 AM)
											U.S. TMT PRE-MKT: Apple, IBM, Sprint/T-Mobile, Yahoo (Bloomberg First Word - Bloomberg, 02/10/2014 07:12 AM)
											U.S. PRE-MARKET MOVERS: AFSI APRI BWP FWM KNDI MDCO MPAA PLUG (Bloomberg First Word - Bloomberg, 02/10/2014 08:41 AM)
											CommVault Announces Recent Share Repurchases (PR Newswire (U.S.) - Factiva, 02/10/2014 09:15 AM)
											*COMMVAULT REPORTS RECENT SHR REPURCHASES (BLOOMBERG News - Bloomberg, $02/10/2014$ 09:15 AM)
											$ \begin{tabular}{ll} \textbf{CommVault Announces Recent Share Repurchases} & (PR \ Newswire - Bloomberg, 02/10/2014 \\ 09:15 \ AM) \end{tabular} $
											eq:UPDATE:JMP Securities Upgrades CommVault Systems on Multiple Factors (Benzinga.com-Factiva, 02/10/2014~10:42~AM)

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Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
2/11/2014 Tue	805,829	\$67.84	-0.01%	1.04%	0.49%	1.92%	-1.93%	-\$1.31	-1.16	24.94%	CommVault at Stifel, Nicolaus Technology, Internet & Media Conference - Final (CQ FD Disclosure - Factiva, 02/11/2014)
											CommVault Systems, Inc. Patent Application Titled "Data Mining Systems and Methods for Heterogeneous Data Sources" Published Online (Information Technology Newsweekly - Factiva, 02/11/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 02/11/2014)
2/12/2014 Wed	796,018	\$68.40	0.83%	0.25%	0.03%	0.18%	0.65%	\$0.44	0.39	70.03%	COMMVAULT SYSTEMS INC SC 13G/A (SEC - SEC Edgar, 02/12/2014)
											USFedNewsService: US Patent Issued to CommVault Systems on Feb. 11 for "Systems and methods for remote monitoring in a computer (RE1 - Bloomberg, 02/12/2014 10:00 AM)
2/13/2014 Thu	911,217	\$69.38	1.43%	0.94%	0.58%	1.85%	-0.41%	-\$0.28	-0.25	80.45%	CommVault Systems, Inc. Patent Application Titled "Data Mining Systems and Methods for Heterogeneous Data Sources" Published Online (Politics & Government Week - Factiva, 02/13/2014)
											CommVault Systems, Inc. Patent Application Titled "Systems and Methods for Performing Storage Operations Using Network Attached Storage" Published Online (Computer Weekly News - Factiva, 02/13/2014)
											CommVault Systems, Inc. Patent Application Titled "Systems and Methods for Performing Storage Operations Using Network Attached Storage" Published Online (Politics & Government Week - Factiva, 02/13/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form SC 13G, Statement of Acquisition of Beneficial Ownership By Individuals [Amend] (Jan. 28, 2014) (Computer Weekly News - Factiva, 02/13/2014)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 02/13/2014)
2/14/2014 Fri	717,109	\$69.04	-0.49%	0.08%	-0.28%	-0.49%	0.00%	\$0.00	0	99.92%	COMMVAULT SYSTEMS INC SC 13G/A (SEC - SEC Edgar, 02/14/2014)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 02/14/2014)
2/15/2014 Sat 2/16/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 02/16/2014) Wright Investors Service Analyst Report (Analyst Report - Manual Entry, 02/16/2014)
2/17/2014 Mon											
2/18/2014 Tue	792,714	\$69.02	-0.03%	0.72%	0.37%	1.23%	-1.26%	-\$0.87	-0.76	44.75%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 02/18/2014)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											CommVault Systems, Inc. Researchers Submit Patent Application, "Systems and Methods for Retaining and Using Data Block Signatures in Data Protection Operations", for Approval (Information Technology Newsweekly - Factiva, 02/18/2014)
											N ROBERT HAMMER, C.O.B., SELLS 113,481 FROM 2/14/14-2/18/14 OF CVL (Washington Service - Bloomberg, 02/18/2014 05:00 PM)
2/19/2014 Wed	711,786	\$68.88	-0.20%	-0.81%	0.46%	-0.78%	0.58%	\$0.40	0.35	72.74%	CommVault Systems, Inc. Patent Issued for System and Method for Performing an Image Level Snapshot and for Restoring Partial Volume Data (Journal of Engineering - Factiva, 02/19/2014)
											USFedNewsService: US Patent Issued to CommVault Systems on Feb. 18 for "Systems and methods for resynchronizing information" (RE1 - Bloomberg, 02/19/2014 09:40 AM)
											thm:usfedNewsService: US Patent Issued to CommVault Systems on Feb.~18 for "System and method for storage operation access security" (RE1 - Bloomberg, 02/19/2014 09:52 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on Feb. 18 for "Memory configuration for data replication system (RE1 - Bloomberg, 02/19/2014 11:21 AM)
2/20/2014 Thu	692,831	\$68.97	0.13%	0.70%	0.03%	0.74%	-0.61%	-\$0.42	-0.37	71.18%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 02/20/2014)
											CommVault Systems, Inc. Researchers Submit Patent Application, "Systems and Methods for Retaining and Using Data Block Signatures in Data Protection Operations", for Approval (Computer Weekly News - Factiva, 02/20/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 10-Q, Quarterly Report [Sections 13 Or 15(D)] (Jan. 31, 2014) (Computer Weekly News - Factiva, 02/20/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 8-K, Current Report (Feb. 3, 2014) (Computer Weekly News - Factiva, 02/20/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form SC 13G, Statement of Acquisition of Beneficial Ownership By Individuals (Jan. 30, 2014) (Computer Weekly News - Factiva, 02/20/2014)
											DJ CommVault Systems Inc, Inst Holders, 4Q 2013 (CVLT) (Dow Jones Institutional News - Factiva, 02/20/2014 03:18 AM)
											GARY MERRILL,Officer,SELLS 836 ON 2/18/14 OF CVLT (Washington Service - Bloomberg, 02/20/2014 04:21 PM)
											COMMVAULT SYSTEMS INC: HAMMER N ROBERT FILES TO SELL 200,000 SHA (Washington Service - Bloomberg, 02/20/2014 10:39 PM)

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Appendix C
CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
					Excess	Predicted		Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events
2/21/2014 Fri	851,439	\$68.92	-0.07%	-0.10%	-0.04%	-0.45%	0.38%	\$0.26	0.23	81.81%	COMMVAULT SYSTEMS REPORTS DISPOSITION BY CHIEF ACCOUNTING OFFICER MERRILL (New Jersey) (US Fed News - Factiva, 02/21/2014)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 02/21/2014)
2/22/2014 Sat 2/23/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 02/23/2014)
2/24/2014 Mon	852,884				-0.23%	0.37%	-0.66%	-\$0.46		68.65%	
2/25/2014 Tue	520,665	\$68.81	0.13%	-0.12%	0.05%	-0.38%	0.51%	\$0.35	0.31	75.68%	CommVault Systems, Inc. Patent Issued for Systems and Methods for Remote Monitoring in a Computer Network (Information Technology Newsweekly - Factiva, 02/25/2014)
											CommVault Announces Participation In Upcoming Investor Conferences (PR Newswire (U.S.) - Factiva, 02/25/2014 09:15 AM)
											CommVault Announces Participation In Upcoming Investor Conferences (PR Newswire - Bloomberg, 02/25/2014 09:15 AM)
2/26/2014 Wed	468,636	\$68.96	0.22%	0.11%	0.56%	0.61%	-0.39%	-\$0.27	-0.24	81.08%	CommVault Systems, Inc Company News (NewsTrak Daily - Factiva, 02/26/2014)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Remote Monitoring in a Computer Network (Journal of Engineering - Factiva, 02/26/2014)
											USFedNewsService: US Patent Issued to CommVault Systems on Feb. 25 for "Systems and methods for migrating components in a (RE1 - Bloomberg, 02/26/2014 06:41 AM)
2/27/2014 Thu	505,725	\$69.52	0.81%	0.63%	0.13%	0.75%	0.07%	\$0.05	0.04	96.79%	CommVault Systems, Inc. Patent Issued for Systems and Methods for Remote Monitoring in a Computer Network (Computer Weekly News - Factiva, 02/27/2014)
											CommVault Systems, Inc. Researchers Submit Patent Application, "Failover Systems and Methods for Performing Backup Operations", for Approval (Politics & Government Week - Factiva, 02/27/2014)
											DJ CommVault Systems Inc, Inst Holders, 4Q 2013 (CVLT) (Dow Jones Institutional News - Factiva, 02/27/2014 06:27 PM)
2/28/2014 Fri	501,458	\$68.88	-0.92%	-0.25%	-0.09%	-0.72%	-0.20%	-\$0.14	-0.12	90.45%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 02/28/2014)
											US Patent Issued to CommVault Systems on Feb. 25 for "Systems and methods for migrating components in a hierarchical storage network" (New Jersey Inventors) (US Fed News - Factiva, 02/28/2014)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 02/28/2014)

3/1/2014 Sat

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Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
3/2/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 03/02/2014)
3/3/2014 Mon	600,332	\$68.36	-0.75%	-0.70%	-0.48%	-1.82%	1.07%	\$0.74	0.65	51.51%	CommVault Software Helps Protect Real-Time Analytics Environments with New Integration with SAP HANA(R) Platform (PR Newswire (U.S.) - Factiva, 03/03/2014 08:30 AM)
											CommVault Software Helps Protect Real-Time Analytics Environments with New Integration with SAP HANA® Platform (PR Newswire - Bloomberg, 03/03/2014 08:30 AM)
3/4/2014 Tue	580,103	\$71.37	4.40%	1.75%	0.40%	2.59%	1.81%	\$1.24	1.1	27.22%	CommVault Systems, Inc. Patent Issued for Systems and Methods for Resynchronizing Information (Information Technology Newsweekly - Factiva, 03/04/2014)
											U.S. TMT PRE-MKT: GWRE, VIPS Views Beat; AMAT, QCOM Annual Mtgs (Bloomberg First Word - Bloomberg, 03/04/2014 07:51 AM)
											eq:U.S. Stock Options With Biggest Changes in Implied Volatility (BLOOMBERG News-Bloomberg, 03/04/2014 03:00 PM)
3/5/2014 Wed	772,822	\$69.98	-1.95%	0.15%	-0.52%	-0.72%	-1.23%	-\$0.88	-0.74	45.82%	CommVault Systems, Inc. Patent Issued for System and Method for Generating and Managing Quick Recovery Volumes (Journal of Engineering - Factiva, 03/05/2014)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Resynchronizing Information (Journal of Engineering - Factiva, 03/05/2014)
											$USFed News Service: \ US\ Patent\ Issued\ to\ CommVault\ Systems\ on\ March\ 4\ for\ "Systems\ and\ methods\ for\ managing\ snapshots\ of\ replicated\ (RE1\ -\ Bloomberg,\ 03/05/2014\ 09:10\ AM)$
3/6/2014 Thu	543,088	\$69.23	-1.07%	-0.13%	0.18%	-0.18%	-0.89%	-\$0.63	-0.54	58.88%	CommVault Systems, Inc. Patent Issued for System and Method for Generating and Managing Quick Recovery Volumes (Computer Weekly News - Factiva, 03/06/2014)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Resynchronizing Information (Computer Weekly News - Factiva, 03/06/2014)
											Globaldata Analyst Report (Analyst Report - Manual Entry, 03/06/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Feb. 18, 2014) (Computer Weekly News - Factiva, 03/06/2014)
											S&P Global Compustat Company Analysis Analyst Report (Analyst Report - Manual Entry, 03/06/2014)
3/7/2014 Fri	783,766	\$67.49	-2.51%	-0.37%	-0.25%	-1.08%	-1.43%	-\$0.99	-0.87	38.58%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 03/07/2014)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return	Market Return	Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 03/07/2014)
											VMware's VSAN Said to Price \$2,000-\$2,500 Per Socket: CRN (Yday) (Bloomberg First Word - Bloomberg, 03/07/2014 05:15 AM)
											N Robert Hammer, Chairman,, Sells 148,339 CVLT US 03/05/14 (BDA - Bloomberg, 03/07/2014 04:38 PM)
											N ROBERT HAMMER, C.O.B., SELLS 148,339 ON 3/5/14 OF CVLT (Washington Service - Bloomberg, 03/07/2014 04:38 PM)
3/8/2014 Sat 3/9/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 03/09/2014)
3/10/2014 Mon	1,137,329	\$65.31	-3.23%	-0.04%	-0.78%	-1.39%	-1.84%	-\$1.24	-1.12	26.70%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 03/10/2014)
											COMMVAULT SYSTEMS INC SC 13G/A (SEC - SEC Edgar, 03/10/2014)
											David R West, SVP, Mkt &, Sells 2 CVLT US 03/06/14 (BDA - Bloomberg, 03/10/2014 04:30 PM)
											COMMVAULT SYSTEMS INC: HAMMER N ROBERT FILES TO SELL 148,339 SHA (Washington Service - Bloomberg, 03/10/2014 10:29 PM)
											COMMVAULT SYSTEMS INC: WEST DAVID R FILES TO SELL 2 SHARES (Washington Service - Bloomberg, 03/10/2014 10:31 PM)
3/11/2014 Tue	1,543,930	\$63.99	-2.02%	-0.63%	-0.30%	-1.56%	-0.46%	-\$0.30	-0.28	78.28%	CommVault at Piper Jaffray Technology, Media and Telecommunications Conference - Final
3/12/2014 Wed	728,547	\$63.43	-0.88%	0.39%	-0.14%	0.04%	-0.92%	-\$0.59	-0.55	58.04%	CommVault Systems, Inc. Patent Issued for Systems and Methods for Migrating Components in a Hierarchical Storage Network (Journal of Engineering - Factiva, 03/12/2014)
											WIPO PUBLISHES PATENT OF COMMVAULT SYSTEMS, RAJIV KOTTOMTHARAYIL, DEEPAK RAGHUNATH ATTARDE AND MANOJ KUMAR VIJAYAN FOR "BLOCK-LEVEL SINGLE INSTANCING" (AMERICAN INVENTORS) (US Fed News - Factiva, 03/12/2014)
											CommVault's Scott Skidmore Named a CRN Channel Chief for Second Consecutive Year (PR Newswire (U.S.) - Factiva, 03/12/2014 08:30 AM)
											lem:commVault's Scott Skidmore Named a CRN Channel Chief for Second Consecutive Year~(PR Newswire - Bloomberg, 03/12/2014~08:30~AM)

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[1]	[2]	[3]	[4]	[5] Market	[6] Industry Excess	[7] Predicted		[9] Abnormal Price	[10]	[11]	[12]
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events
3/13/2014 Thu	1,174,850	\$61.92	-2.38%	-1.45%	-0.71%	-3.32%	0.94%	\$0.60	0.57	57.02%	CommVault Systems, Inc. Patent Issued for Systems and Methods for Migrating Components in a Hierarchical Storage Network (Computer Weekly News - Factiva, 03/13/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Feb. 20, 2014) (Computer Weekly News - Factiva, 03/13/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 03/13/2014)
											Certified Integrations, Enhanced Softwares, Expanded Availability, and Leadership Changes - Analyst Notes on CommVault, Cadence, Red Hat, Nuance Communications, and Mattersight (PR Newswire (U.S.) - Factiva, 03/13/2014 08:00 AM)
											*CERTIFIED INTEGRATIONS, ENHANCED SOFTWARES, EXPANDED (BLOOMBERG News - Bloomberg, $03/13/2014$ $08:00$ AM)
											Certified Integrations, Enhanced Softwares, Expanded Availability, and Leadership Changes - Analyst Notes on CommVault, Cadence, (PR Newswire - Bloomberg, 03/13/2014 08:00 AM)
											CommVault Enables Network of 200+ Service Providers Globally to Deliver Cloud Data Protection (PR Newswire (U.S.) - Factiva, 03/13/2014 08:30 AM)
											CommVault Enables Network of 200+ Service Providers Globally to Deliver Cloud Data Protection (PR Newswire - Bloomberg, 03/13/2014 08:30 AM)
											Stocks Hitting 52-Week Lows (Benzinga.com - Factiva, 03/13/2014 10:29 AM)
3/14/2014 Fri	592,028	\$62.85	1.50%	-0.35%	0.06%	-0.68%	2.18%	\$1.35	1.32	19.08%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry,
3/15/2014 Sat 3/16/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 03/16/2014)
											*COMMVAULT RAISED TO BUY VS NEUTRAL AT MIZUHO, PT \$80 (Bloomberg First Word - Bloomberg, 03/16/2014 08:15 PM)
3/17/2014 Mon	787,483	\$63.28	0.68%	0.82%	-0.27%	0.43%	0.26%	\$0.16	0.15	87.76%	Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 03/17/2014)
											U.S. TMT PRE-MKT: Alibaba Starts U.S. IPO Process; Weibo IPO (Bloomberg First Word - Bloomberg, $03/17/2014$ 07:31 AM)
											U.S. PRE-MARKET MOVERS: FPRX HNR HTZ ICPT PTEN SINA SUNE UQM (Bloomberg First Word - Bloomberg, 03/17/2014 08:40 AM)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
3/18/2014 Tue	963,449	\$66.20	4.61%	1.25%	0.85%	2.65%	1.97%	\$1.24	1.18	24.00%	CommVault Systems, Inc. Patent Issued for Combined Stream Auxiliary Copy System and Method (Information Technology Newsweekly - Factiva, 03/18/2014)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Managing Snapshots of Replicated Databases (Information Technology Newsweekly - Factiva, 03/18/2014)
											Sadif Analytics Analyst Report (Analyst Report - Manual Entry, 03/18/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 03/18/2014)
											U.S. WRAP: Stocks Climb Amid Housing Data, Putin's Comments (Bloomberg First Word - Bloomberg, 03/18/2014 04:24 PM)
3/19/2014 Wed	1,450,252	\$69.01	4.24%	-0.59%	-0.58%	-1.94%	6.18%	\$4.09	3.72	0.03% **	CommVault move could add 1,500 new jobs (Asbury Park Press - Factiva, 03/19/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 03/19/2014)
											CommVault Systems Inc Company News (NewsTrak Daily - Factiva, 03/19/2014)
											CommVault Systems, Inc. Patent Issued for Combined Stream Auxiliary Copy System and Method (Journal of Engineering - Factiva, 03/19/2014)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Managing Snapshots of Replicated Databases (Journal of Engineering - Factiva, 03/19/2014)
											USFedNewsService: US Patent Issued to CommVault Systems on March 18 for "Writing data and storage system specific metadata to (RE1 - Bloomberg, 03/19/2014 08:55 AM)
											Defense IT Networks, Q1 2014: BGOV Market Analysis (BGV - Bloomberg, 03/19/2014 04:33 PM)
											Gary Merrill, Chief Acco, Relinquishes 28 CVLT US 03/17/14 (BDA - Bloomberg, 03/19/2014 04:37 PM)
3/20/2014 Thu	1,007,073	\$69.36	0.51%	0.27%	-0.27%	-0.21%	0.72%	\$0.50	0.41	68.17%	Chasing A Stock Can Open Door To One Bad Move After Another (Investor's Business Daily - Factiva, 03/20/2014)
											CommVault Systems, Inc. Patent Issued for Combined Stream Auxiliary Copy System and Method (Computer Weekly News - Factiva, 03/20/2014)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Managing Snapshots of Replicated Databases (Computer Weekly News - Factiva, 03/20/2014)
											$\label{thm:control} \textbf{HOSTING Leverages CommVault Simpana Software to Offer Cloud-Based Enterprise Backup Solution for Data Protection and Rapid Recovery (PR Newswire (U.S.) - Factiva, 03/20/2014 08:30 AM)}$

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											HOSTING Leverages CommVault Simpana Software to Offer Cloud-Based Enterprise Backup Solution for Data Protection and Rapid (PR Newswire - Bloomberg, 03/20/2014 08:30 AM)
3/21/2014 Fri	1,368,332	\$69.84	0.69%	-0.98%	-0.04%	-1.55%	2.24%	\$1.55	1.28	20.27%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 03/21/2014)
											Elevated Options Volume: ADI CVLT EIX ETR GIS MEG NE NUE SONS (Bloomberg First Word - Bloomberg, $03/21/2014$ $02:10$ PM)
3/22/2014 Sat 3/23/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 03/23/2014)
3/24/2014 Mon	1,246,309	\$69.42	-0.60%	-1.18%	0.21%	-1.40%	0.80%	\$0.56	0.45	65.07%	COMMVAULT SYSTEMS INC SC 13G/A (SEC - SEC Edgar, 03/24/2014)
											Application Software Industry Announce Survey Results and New Applications - Analyst Notes on FireEye, Splunk, Red Hat, CommVault Systems, and Intuit, Splunk, Red Hat, CommVault Systems, and (PR Newswire (U.S.) - Factiva, 03/24/2014 08:00 AM)
3/25/2014 Tue	860,199	\$68.63	-1.14%	0.19%	-0.48%	-0.59%	-0.55%	-\$0.38	-0.31	75.66%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 03/25/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 03/25/2014)
											COMMVAULT SYSTEMS INC 4/A (SEC - SEC Edgar, 03/25/2014)
											COMMVAULT SYSTEMS INC 4/A (SEC - SEC Edgar, 03/25/2014)
											COMMVAULT SYSTEMS INC 4/A (SEC - SEC Edgar, 03/25/2014)
											Commvault Systems, Inc. Researchers Submit Patent Application, "Stubbing Systems and Methods in a Data Replication Environment", for Approval (Information Technology Newsweekly - Factiva, 03/25/2014)
											N Robert Hammer, Chairman, Sells 6,686 CVLT US 03/21/14 (BDA - Bloomberg, $03/25/2014\ 05:00\ PM)$
											N ROBERT HAMMER,C.O.B.,SELLS 6,686 ON 3/21/14 OF CVLT (Washington Service - Bloomberg, 03/25/2014 05:00 PM)
											N Robert Hammer, Chairman, Relinquishes 1,056 CVLT US 01/15/14 (BDA - Bloomberg, $03/25/2014\ 05:02\ PM)$
											N Robert Hammer, Chairman, Relinquishes 237 CVLT US 01/03/14 (BDA - Bloomberg, $03/25/2014\ 05:03\ PM)$
											David R West, SVP, Mkt &, Sells 18,878 CVLT US 03/21/14 (BDA - Bloomberg, 03/25/2014 05:03 PM)

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[1]	[2]	[3]	[4]	[5]	[6] Industry		[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
										F	David R West, SVP, Mkt &, Relinquishes 84 CVLT US 01/03/14 (BDA - Bloomberg, 03/25/2014 05:04 PM)
											DAVID R WEST, Vice Pres., SELLS 18,878 ON 3/21/14 OF CVLT (Washington Service - Bloomberg, 03/25/2014 05:05 PM)
											N ROBERT HAMMER, C.O.B., SURRENDERS 1,056 ON 1/15/14 OF CVLT-AMD (Washington Service - Bloomberg, 03/25/2014 05:05 PM)
											N ROBERT HAMMER, C.O.B., SURRENDERS 237 ON 1/3/14 OF CVLT-AMD (Washington Service - Bloomberg, 03/25/2014 05:06 PM)
											COMMVAULT SYSTEMS INC: WEST DAVID R FILES TO SELL 16,978 SHARES (Washington Service - Bloomberg, 03/25/2014 10:34 PM)
											COMMVAULT SYSTEMS INC: HAMMER N ROBERT FILES TO SELL 6,686 SHARE (Washington Service - Bloomberg, 03/25/2014 10:34 PM)
3/26/2014 Wed	991,618	\$65.46	-4.63%	-1.43%	-0.53%	-2.72%	-1.91%	-\$1.31	-1.09	27.86%	U.S. WRAP: Stocks Fall After President Obama Remarks on Crimea (Bloomberg First Word -
3/27/2014 Thu	811,631	\$65.22	-0.36%	-0.52%	0.39%	-0.32%	-0.04%	-\$0.02	-0.02	98.34%	Commvault Systems, Inc. Researchers Submit Patent Application, "Stubbing Systems and Methods in a Data Replication Environment", for Approval (Computer Weekly News - Factiva, 03/27/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Mar. 7, 2014) (Computer Weekly News - Factiva, 03/27/2014)
											CommVault Simpana Software Helps Scottish Fire & Rescue Service Improve Business Continuity and Information Compliance (PR Newswire (U.S.) - Factiva, 03/27/2014 08:30 AM)
											CommVault Simpana Software Helps Scottish Fire & Rescue Service Improve Business Continuity and Information Compliance (PR Newswire - Bloomberg, 03/27/2014 08:30 AM)
3/28/2014 Fri	769,180	\$64.48	-1.13%	0.11%	-0.15%	-0.27%	-0.87%	-\$0.57	-0.49	62.39%	CommVault Systems Inc Company News (NewsTrak Daily - Factiva, 03/28/2014)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 03/28/2014)
3/29/2014 Sat 3/30/2014 Sun 3/31/2014 Mon	545,709	\$64.95	0.73%	1.05%	0.39%	1.70%	-0.97%	-\$0.63	-0.55	58.34%	Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 03/30/2014)
	/										

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
4/1/2014 Tue	1,172,686	\$68.66	5.71%	1.66%	0.04%	1.98%	3.73%	\$2.43	2.12	3.62% *	CommVault Systems, Inc. "Systems and Methods for Selective Data Replication" in Patent Application Approval Process (Information Technology Newsweekly - Factiva, 04/01/2014)
											CommVault Systems, Inc. Patent Issued for Writing Data and Storage System Specific Metadata to Network Attached Storage Device (Information Technology Newsweekly - Factiva, 04/01/2014)
											Oppenheimer & Co. Inc. Analyst Report (Analyst Report - Manual Entry, 04/01/2014)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 04/01/2014)
											Information Technology Equities Coverage Research on Tableau Software, Rally Software Development, CommVault Systems, and ServiceNow (PR Newswire (U.S.) - Factiva, 04/01/2014 08:36 AM)
											WDC, STX, SNDK, FIO, CVLT May Gain From Cloud Capex: Pac. Crest (Bloomberg First Word - Bloomberg, 04/01/2014 12:07 PM)
											U.S. WRAP: Stocks Climb, S&P 500 Closes at Record (Bloomberg First Word - Bloomberg, 04/01/2014 04:34 PM)
4/2/2014 Wed	453,585	\$68.07	-0.86%	0.20%	0.02%	0.08%	-0.94%	-\$0.65	-0.53	60.00%	CommVault Systems, Inc. "Systems and Methods for Selective Data Replication" in Patent Application Approval Process (Telecommunications Weekly - Factiva, 04/02/2014)
											CommVault Systems, Inc. Patent Issued for Writing Data and Storage System Specific Metadata to Network Attached Storage Device (Journal of Engineering - Factiva, 04/02/2014)
4/3/2014 Thu	437,132	\$66.83	-1.82%	-0.90%	-0.65%	-2.36%	0.53%	\$0.36	0.3	76.65%	CommVault Systems, Inc. "System and Method for Sharing Media in a Computer Network" in Patent Application Approval Process (Computer Weekly News - Factiva, 04/03/2014)
											CommVault Systems, Inc. "System and Method for Sharing Media in a Computer Network" in Patent Application Approval Process (Politics & Government Week - Factiva, 04/03/2014)
											CommVault Systems, Inc. "Systems and Methods for Selective Data Replication" in Patent Application Approval Process (Computer Weekly News - Factiva, 04/03/2014)
											CommVault Systems, Inc. Patent Issued for Writing Data and Storage System Specific Metadata to Network Attached Storage Device (Computer Weekly News - Factiva, 04/03/2014)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
			_		Excess	Predicted	Abnormal	Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events
											Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Mar. 19, 2014) (Computer Weekly News - Factiva, 04/03/2014)
											$ \textbf{S\&P Global Compustat Company Analysis Analyst Report} \ (Analyst Report - Manual Entry, \\ 04/03/2014) $
											Technology Companies Announce Partnerships, Expansions, and New Products - Analyst Notes on CommVault, Synopsys, Tyler, PTC, and Teradyne (PR Newswire (U.S.) - Factiva, 04/03/2014 08:01 AM)
4/4/2014 Fri	494,896	\$65.75	-1.62%	-2.59%	0.45%	-3.20%	1.58%	\$1.06	0.89	37.76%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/04/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/04/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/04/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/04/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/04/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/04/2014)
											COMMVAULT SYSTEMS INC 4/A (SEC - SEC Edgar, 04/04/2014)
											COMMVAULT SYSTEMS INC 4/A (SEC - SEC Edgar, 04/04/2014)
											COMMVAULT SYSTEMS INC 4/A (SEC - SEC Edgar, 04/04/2014)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 04/04/2014)
											Storage Recovery Positive for EMC, FIO, CVLT: Pacific Crest (Bloomberg First Word - Bloomberg, 04/04/2014 08:40 AM)
											Alan G Bunte, Executive, Relinquishes 155 CVLT US 04/02/14 (BDA - Bloomberg, 04/04/2014 05:07 PM)
											ALAN G BUNTE, C.O.O, SURRENDERS 155 ON 4/2/14 OF CVLT (Washington Service - Bloomberg, 04/04/2014 05:07 PM)
											Brian Carolan, VP Finance, Relinquishes 76 CVLT US 04/02/14 (BDA - Bloomberg, 04/04/2014 05:08 PM)
											N Robert Hammer, Chairman, Relinquishes 289 CVLT US 04/02/14 (BDA - Bloomberg, 04/04/2014 05:09 PM)

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[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
1-1	[2]	[0]	1.1		Industry			Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											N ROBERT HAMMER,C.O.B.,SURRENDERS 289 ON 4/2/14 OF CVLT (Washington Service - Bloomberg, 04/04/2014 05:09 PM)
											Gary Merrill, Chief Acco, Relinquishes 31 CVLT US 04/02/14 (BDA - Bloomberg, $04/04/2014\ 05:09\ PM)$
											LOUIS F MICELI, Vice Pres., SURRENDERS 106 ON 4/2/14 OF CVLT (Washington Service - Bloomberg, 04/04/2014 05:10 PM)
											Louis F Miceli, Senior VP, Relinquishes 106 CVLT US 04/02/14 (BDA - Bloomberg, $04/04/2014$ 05:10 PM)
											RONALD L MIILLER, Vice Pres., SURRENDERS 131 ON 4/2/14 OF CVLT (Washington Service - Bloomberg, 04/04/2014 05:11 PM)
											Ronald L Miiller, SVP, World, Relinquishes 131 CVLT US 04/02/14 (BDA - Bloomberg, 04/04/2014 05:11 PM)
											Alan G Bunte, Executive, Relinquishes 2,437 CVLT US 01/03/14 (BDA - Bloomberg, 04/04/2014 05:38 PM)
											Louis F Miceli, Senior VP, Relinquishes 121 CVLT US 01/03/14 (BDA - Bloomberg, 04/04/2014 05:38 PM)
											Ronald L Miiller, SVP, World, Relinquishes 149 CVLT US 01/03/14 (BDA - Bloomberg, 04/04/2014 05:39 PM)
											ALAN G BUNTE, C.O.O, SURRENDERS 2,437 ON 1/3/14 OF CVLT-AMD (Washington Service - Bloomberg, 04/04/2014 05:41 PM)
											LOUIS F MICELI, Vice Pres., SURRENDERS 121 ON 1/3/14 OF CVLT-AMD (Washington Service - Bloomberg, 04/04/2014 05:43 PM)
											RONALD L MIILLER, Vice Pres., SURRENDERS 149 ON 1/3/14 OF CVLT-AMD (Washington Service - Bloomberg, 04/04/2014 05:44 PM)
4/5/2014 Sat											
4/6/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 04/06/2014)
											Wright Investors Service Analyst Report (Analyst Report - Manual Entry, 04/06/2014)
4/7/2014 Mon	706,712	\$66.81	1.61%	-1.16%	0.17%	-1.50%	3.11%	\$2.05	1.74	8.52%	COMMVAULT SYSTEMS REPORTS DISPOSITION BY EXECUTIVE VP BUNTE (New Jersey) (US Fed News - Factiva, 04/07/2014)
											COMMVAULT SYSTEMS REPORTS DISPOSITION BY SENIOR VP WORLDWIDE SALES MIILLER (New Jersey) (US Fed News - Factiva, 04/07/2014)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return		Excess Return	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
Date	v orume	THE	- Actura	recuin	Return	Return	Return	React	· stat	pvanue	Consolidated Minerals Taps CommVault to Mine Valuable Data through Simpana 10 Search and Archive Capabilities (PR Newswire (U.S.) - Factiva, 04/07/2014 08:30 AM)
											Consolidated Minerals Taps CommVault to Mine Valuable Data through Simpana 10 Search and Archive Capabilities (PR Newswire - Bloomberg, 04/07/2014 08:30 AM)
4/8/2014 Tue	653,651	\$67.48	1.00%	0.82%	-0.62%	-0.02%	1.02%	\$0.68	0.56	57.44%	USFedNewsService: COMMVAULT SYSTEMS REPORTS DISPOSITION BY EXECUTIVE
4/9/2014 Wed	902,116	\$70.80	4.92%	1.73%	0.28%	2.46%	2.46%	\$1.66	1.38	16.97%	New Survey Suggests APAC Companies are Failing to Realise Efficient Business Value from Exponential Data Growth (PR Newswire (U.S.) - Factiva, 04/09/2014 08:30 AM)
											New Survey Suggests APAC Companies are Failing to Realise Efficient Business Value from Exponential Data Growth (PR Newswire - Bloomberg, 04/09/2014 08:30 AM)
											CommVault Announces Earnings Release Date (PR Newswire (U.S.) - Factiva, 04/09/2014 09:15 AM)
											CommVault Announces Earnings Release Date (PR Newswire - Bloomberg, 04/09/2014 09:15 AM)
4/10/2014 Thu	925,730	\$66.21	-6.48%	-3.10%	0.33%	-3.79%	-2.69%	-\$1.90	-1.5	13.63%	Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Mar. 25, 2014) (Computer Weekly News - Factiva, 04/10/2014)
											Prepackaged Software; Commvault Systems Inc. Files SEC Form SC 13G, Statement of Acquisition of Beneficial Ownership By Individuals [Amend] (Mar. 24, 2014) (Computer Weekly News - Factiva, 04/10/2014)
											U.S. WRAP: Stocks Fall, Tech Selloff Resumes (Bloomberg First Word - Bloomberg, 04/10/2014 04:33 PM)
											CommVault Systems Inc Enters Wave C of Elliott Wave Cycle (Recognia Alert Wire - Bloomberg, 04/10/2014 06:27 PM)
4/11/2014 Fri	953,145	\$62.70	-5.30%	-1.34%	-0.81%	-3.02%	-2.28%	-\$1.51	-1.27	20.63%	Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 04/11/2014)
											Validea Analyst Report (Analyst Report - Manual Entry, 04/11/2014)
											U.S. WRAP: Stocks Fall as JP Morgan Misses (Bloomberg First Word - Bloomberg, 04/11/2014 04:34 PM)
4/12/2014 Sat 4/13/2014 Sun											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 04/13/2014)

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							CommVa	ult News	Chron	ology wit	th Daily Statistics
[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Drice	Dotum		Excess	Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
4/14/2014 Mon	480,997				-0.13%	0.48%	2.35%	\$1.47		19.66%	Events
4/15/2014 Tue	624,825				0.44%	0.83%	0.50%	\$0.32		78.32%	Cloud Investing Beyond Amazon, Google and Microsoft (The Wall Street Journal Online -
4/16/2014 Wed	851,792	\$64.04	-1.97%	1.29%	0.14%	1.91%	-3.88%	-\$2.54	-2.14	3.47% *	CommVault Systems, Inc. Patent Issued for Systems and Methods for Performing Storage Operations in a Computer Network (Journal of Engineering - Factiva, 04/16/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 04/16/2014)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 04/16/2014)
											Cloud Investing Beyond Amazon, Google and Microsoft (Dow Jones Top North American Equities Stories - Factiva, 04/16/2014 02:30 PM)
											Cloud Investing Beyond Amazon, Google and Microsoft (Dow Jones Top Global Market Stories - Factiva, 04/16/2014 06:40 PM)
4/17/2014 Thu	645,212	\$65.08	1.62%	0.23%	0.77%	1.15%	0.48%	\$0.31	0.26	79.63%	COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/17/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/17/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/17/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/17/2014)
											COMMVAULT SYSTEMS INC 4 (SEC - SEC Edgar, 04/17/2014)
											CommVault Systems, Inc. Patent Issued for Systems and Methods for Performing Storage Operations in a Computer Network (Computer Weekly News - Factiva, 04/17/2014)
											ALAN G BUNTE, C.O.O, SURRENDERS 1,591 ON 4/15/14 OF CVLT (Washington Service - Bloomberg, 04/17/2014 04:06 PM)
											Alan G Bunte, Executive, Relinquishes 1,591 CVLT US 04/15/14 (BDA - Bloomberg, 04/17/2014 04:07 PM)
											BRIAN CAROLAN, C.F.O., SURRENDERS 797 ON 4/15/14 OF CVLT (Washington Service - Bloomberg, 04/17/2014 04:07 PM)
											Brian Carolan, VP Finance, Relinquishes 797 CVLT US 04/15/14 (BDA - Bloomberg, 04/17/2014 04:07 PM)
											N Robert Hammer, Chairman, Relinquishes 2,460 CVLT US 04/15/14 (BDA - Bloomberg, $04/17/2014$ 04:07 PM)
											N ROBERT HAMMER, C.O.B., SURRENDERS 2,460 ON 4/15/14 OF CVLT (Washington Service - Bloomberg, 04/17/2014 04:07 PM)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
										•	Gary Merrill, Chief Acco, Relinquishes 273 CVLT US 04/15/14 (BDA - Bloomberg, 04/17/2014 04:08 PM)
											GARY MERRILL,Officer,SURRENDERS 273 ON 4/15/14 OF CVLT (Washington Service - Bloomberg, 04/17/2014 04:08 PM)
											Ronald L Miiller, SVP, World, Relinquishes 1,095 CVLT US 04/15/14 (BDA - Bloomberg, 04/17/2014 04:08 PM)
											RONALD L MIILLER, Vice Pres., SURRENDERS 1,095 ON 4/15/14 OF CVLT (Washington Service - Bloomberg, 04/17/2014 04:09 PM)
4/18/2014 Fri											COMMVAULT SYSTEMS REPORTS DISPOSITION BY CHIEF ACCOUNTING OFFICER MERRILL (New Jersey) (US Fed News - Factiva, 04/18/2014)
											COMMVAULT SYSTEMS REPORTS DISPOSITION BY SENIOR VP WORLDWIDE SALES MIILLER (New Jersey) (US Fed News - Factiva, 04/18/2014)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 04/18/2014)
4/19/2014 Sat											USFedNewsService: COMMVAULT SYSTEMS REPORTS DISPOSITION BY CHIEF ACCOUNTING OFFICER MERRILL (New Jersey) (RE1 - Bloomberg, 04/19/2014 07:17 AM)
											USFedNewsService: COMMVAULT SYSTEMS REPORTS DISPOSITION BY SENIOR VP WORLDWIDE SALES MILLER (New Jersey) (RE1 - Bloomberg, 04/19/2014 07:47 AM)
4/20/2014 Sun											Summit Research Analyst Report (Analyst Report - Manual Entry, 04/20/2014)
											Thestreet.Com Ratings Analyst Report (Analyst Report - Manual Entry, 04/20/2014)
4/21/2014 Mon	554,947	\$66.55	2.26%	0.64%	-0.49%	0.05%	2.20%	\$1.43	1.19	23.63%	Monness Crespi Hardt Analyst Report (Analyst Report - Manual Entry, 04/21/2014)
											Summit Research Analyst Report (Analyst Report - Manual Entry, 04/21/2014)
											Deployments, Successful Partnerships, Leadership Appointments, and Upcoming Conference Calls - Analyst Notes on Allscripts, Cornerstone OnDemand, CommVault, SolarWinds, and Synchronoss (PR Newswire (U.S.) - Factiva, 04/21/2014 08:01 AM)
4/22/2014 Tue	618,913	\$67.41	1.29%	0.97%	0.03%	1.26%	0.04%	\$0.02	0.02	98.48%	Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 04/22/2014)
											CommVault Expands Services to Rackspace to Power Managed Backup Services (PR Newswire (U.S.) - Factiva, 04/22/2014 08:30 AM)

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[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
Date	Volume	Price	Return			Predicted Return	Abnormal Return	Price React	t-stat	p-Value	Events
											CommVault Expands Services to Rackspace to Power Managed Backup Services (PR Newswire - Bloomberg, 04/22/2014 08:30 AM)
4/23/2014 Wed	754,283	\$67.27	-0.21%	-0.83%	0.40%	-0.77%	0.56%	\$0.38	0.3	76.13%	RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 04/23/2014)
											CommVault Helps Partners Accelerate Revenue with New Enhancements to its PartnerAdvantage Program (PR Newswire (U.S.) - Factiva, 04/23/2014 08:30 AM)
											CommVault Helps Partners Accelerate Revenue with New Enhancements to its PartnerAdvantage Program (PR Newswire - Bloomberg, 04/23/2014 08:30 AM)
											$ \begin{tabular}{ll} USFedNewsService: US Patent Issued to CommVault Systems on April 22 for "Systems and methods for storage modeling and costing" (RE1 - Bloomberg, 04/23/2014 08:47 AM) \\ \end{tabular} $
											USFedNewsService: US Patent Issued to CommVault Systems on April 22 for "Parallel access virtual tape library and drives" (New (RE1 - Bloomberg, 04/23/2014 11:16 AM)
											USFedNewsService: US Patent Issued to CommVault Systems on April 22 for "Power management of data processing resources, such as (RE1 - Bloomberg, 04/23/2014 12:28 PM)
											USFedNewsService: US Patent Issued to CommVault Systems on April 22 for "Realtime streaming of multimedia content from secondary (RE1 - Bloomberg, 04/23/2014 02:09 PM)
4/24/2014 Thu	1,466,927	\$68.58	1.95%	0.52%	-0.17%	0.39%	1.56%	\$1.05	0.84	39.99%	Prepackaged Software; Commvault Systems Inc. Files SEC Form 4, Statement of Changes in Beneficial Ownership of Securities (Apr. 4, 2014) (Computer Weekly News - Factiva, 04/24/2014)
											Earnings to be Released Research on Whirlpool, WABCO Holdings, Honda Motor, and CommVault Systems (PR Newswire (U.S.) - Factiva, 04/24/2014 08:05 AM)
											Elevated Options Volume: ADI APC APH BCO BRCM CBM CCE CERN CRK C (Bloomberg First Word - Bloomberg, 04/24/2014 04:24 PM)
											U.S. AFTER-HOURS WRAP: U.S. Said to Seek >\$13b From BofA (Bloomberg First Word - Bloomberg, 04/24/2014 05:54 PM)
4/25/2014 Fri	8,454,518	\$47.56	-30.65%	-1.75%	0.29%	-2.17%	-28.48%	-\$19.53	-15.5	0.00% **	BMO Capital Markets Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											BMO Capital Markets Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											COMMVAULT SYSTEMS INC 8-K (SEC - SEC Edgar, 04/25/2014)
											COMMVAULT SYSTEMS INC 8-K (SEC - SEC Edgar, 04/25/2014)

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Appendix C CommVault News Chronology with Daily Statistics

							CommVa	ult News	Chron	ology wit	h Daily Statistics
[1]	[2]	[3]	[4]	[5] Market	[6] Industry Excess	[7] Predicted	[8]	[9] Abnormal Price	[10]	[11]	[12]
Date	Volume	Price	Return		Return	Return	Return	React	t-stat	p-Value	Events
											CommVault Systems Inc gives FY 2015 revenue guidance in line with analysts' estimates - Conference call (Reuters Significant Developments - Factiva, 04/25/2014)
											Credit Suisse Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Event Brief of Q4 2014 CommVault Earnings Conference Call - Final (CQ FD Disclosure - Factiva, 04/25/2014)
											Jefferies & Company Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Jefferson Research & Management Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Lake Street Capital Markets, LLC Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Major Averages Sell Off Further As Tech Stocks Weigh (Investor's Business Daily - Factiva, 04/25/2014)
											Oppenheimer & Co. Inc. Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Piper Jaffray Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Q4 2014 CommVault Earnings Conference Call - Final (CQ FD Disclosure - Factiva, 04/25/2014)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											RBC Capital Markets Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Stifel Nicolaus Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											William Blair & Company Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											Zacks Investment Research Inc. Analyst Report (Analyst Report - Manual Entry, 04/25/2014)
											$\label{lem:commVault Shares Tumble as Revenue Misses Expectations} \ (The Wall Street Journal Online - Factiva, 04/25/2014 \ 06:01 \ AM)$

U.S. TMT PRE-MKT: MSFT Beats; AMZN Downgraded; TWC Upgraded (Bloomberg First

Word - Bloomberg, 04/25/2014 07:31 AM)

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Appendix C CommVault News Chronology with Daily Statistics

 [1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
				Market	Industry Excess		Abnormal	Abnormal Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Event

CommVault Announces Fourth Quarter and Fiscal 2014 Financial Results (PR Newswire (U.S.) - Factiva, 04/25/2014 07:40 AM)

*COMMVAULT SYSTEMS 4Q EPS 32C :CVLT US (BLOOMBERG News - Bloomberg, 04/25/2014 07:40 AM)

*COMMVAULT SYSTEMS 4Q NON-GAAP EPS 52C :CVLT US (BLOOMBERG News - Bloomberg, 04/25/2014 07:40 AM)

*COMMVAULT SYSTEMS 4Q REV. \$156.8M :CVLT US (BLOOMBERG News - Bloomberg, 04/25/2014 07:40 AM)

*COMMVAULT SYSTEMS 4Q REV. UP 13% :CVLT US (BLOOMBERG News - Bloomberg, 04/25/2014 07:40 AM)

*COMMVAULT SYSTEMS 4Q SERVICE REV. \$77.8M :CVLT US (BLOOMBERG News - Bloomberg, 04/25/2014 07:40 AM)

*COMMVAULT SYSTEMS 4Q SOFTWARE LICENSES REV. \$79.0M :CVLT US (BLOOMBERG News - Bloomberg, 04/25/2014 07:40 AM)

CommVault Announces Fourth Quarter and Fiscal 2014 Financial Results (PR Newswire - Bloomberg, 04/25/2014 07:40 AM)

*COMMVAULT 4Q ADJ. EPS 52C, EST. 48C :CVLT US (Bloomberg First Word - Bloomberg, 04/25/2014 07:40 AM)

*COMMVAULT 4Q REV. \$156.8M, EST. \$160.2M :CVLT US (BLOOMBERG News - Bloomberg, 04/25/2014 07:40 AM)

*COMMVAULT TO ACCELERATE INVESTMENTS ACROSS CO. IN FISCAL 2015 (BLOOMBERG News - Bloomberg, 04/25/2014 07:40 AM)

*COMMVAULT TARGETS DOUBLE DIGIT REV. GROWTH FOR FISCAL 2015 (BLOOMBERG News - Bloomberg, 04/25/2014 07:41 AM)

Commvault Systems 4Q Adj. EPS 52c, Est. 48c (Bloomberg First Word - Bloomberg, 04/25/2014 07:43 AM)

*COMMVAULT SYSTEMS 4Q EARNINGS CONFERENCE CALL BEGINS (BLOOMBERG News - Bloomberg, 04/25/2014 08:30 AM)

*COMMVAULT: ACCELERATING INVESTMENTS ACROSS CO. IN FY15 (BLOOMBERG News - Bloomberg, 04/25/2014 08:34 AM)

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Appendix C CommVault News Chronology with Daily Statistics

 [1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12
					Industry			Abnormal			
				Market	Excess	Predicted	Abnormal	Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events

*COMMVAULT SEES LARGE INCREASE IN ENTERPRISE TEAMS BY END 1H15 (BLOOMBERG News - Bloomberg, 04/25/2014 08:39 AM)

U.S. PRE-MARKET MOVERS: CAMP CUDA CVLT CYTK GIMO MKTO P RGDO (Bloomberg First Word - Bloomberg, 04/25/2014 08:40 AM)

*COMMVAULT SYSTEMS SEES DOUBLE-DIGIT REV. GROWTH IN FY15 (Bloomberg First Word - Bloomberg, 04/25/2014 08:41 AM)

*COMMVAULT TO AGGRESSIVELY INCREASE HIRING RATE IN 1H15 (BLOOMBERG News - Bloomberg, 04/25/2014 08:49 AM)

*COMMVAULT: HIRING TO HAVE NEGATIVE IMPACT ON S-T MARGINS (BLOOMBERG News - Bloomberg, 04/25/2014 08:50 AM)

*COMMVAULT: FY15 OP MARGINS LIKELY FLAT TO SLIGHTLY DOWN (BLOOMBERG News - Bloomberg, 04/25/2014 08:50 AM)

*COMMVAULT SEES CASH TAX RATE REMAINING LOWER THAN GAAP TAX RATE (BLOOMBERG News - Bloomberg, 04/25/2014 08:51 AM)

CommVault Says Itâ€^{TMs} Accelerating Investments Across Co. in FY15 (Bloomberg First Word - Bloomberg, 04/25/2014 08:55 AM)

Highest Readership Growth in Last Hour: CYTK CVLT LPNT BKW AEP (Bloomberg First Word - Bloomberg, 04/25/2014 09:02 AM)

*SEC Short Sale Rule 201 is in Effect: CVLT (NASDAQ) (BSS - Bloomberg, 04/25/2014 09:30 AM)

U.S. EQUITY MOVERS: CVLT DLA GIMO HBI ITRI RTIX SAIA STS VDSI (Bloomberg First Word - Bloomberg, 04/25/2014 09:59 AM)

CommVault Shares Tumble as Revenue Misses Expectations (Dow Jones Institutional News - Factiva, 04/25/2014 10:01 AM)

Stocks Hitting 52-Week Lows (Benzinga.com - Factiva, 04/25/2014 10:14 AM)

U.S. Stock Options With Biggest Changes in Implied Volatility (BLOOMBERG News - Bloomberg, $04/25/2014\ 11:30\ AM)$

CommVault Ends Day Down 31%, Most Since 2006; Rev. Misses Est. (Bloomberg First Word - Bloomberg, 04/25/2014 04:29 PM)

U.S. WRAP: Stocks Drop Amid Increased Tensions Over Ukraine (Bloomberg First Word - Bloomberg, 04/25/2014 04:29 PM)

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Appendix C CommVault News Chronology with Daily Statistics

[1]	[2]	[3]	[4]	[5]	[6] Industry	[7]	[8]	[9] Abnormal	[10]	[11]	[12]
				Market	Excess	Predicted	Abnormal	Price			
Date	Volume	Price	Return	Return	Return	Return	Return	React	t-stat	p-Value	Events
	CommVault Systems Files 8K - Changes To Articles >CVLT (Dow Jones Institutional News - Factiva, 04/25/2014 04:30 PM)										

Notes:

[1] to [8], [10] and [11] See Appendix G.

[9] = [8] * [3] on prior trading day.

[12] News include SEC filings, analyst reports, and news articles. SEC filings include CommVault's SEC filings from May 7, 2013 to April 25, 2014 from the SEC website. The list of analyst reports is based on reports available from the electronic databases (Thomson One, Thomson Reuters Knowledge, Capital IQ) and Counsel. This is not necessarily a comprehensive list of all analyst reports potentially issued on CommVault. For news articles, I searched Bloomberg and Factiva. For Bloomberg, I used the ticker symbol "CVLT US" and searched for all sources with "medium" relevance excluding Internet-linked headlines, Bloomberg Social Velocity Alerts, Company Filings, Edgar SEC - Online, Bloomberg Transcripts, Twitter, Needham, and Bloomberg Intelligence. For Factiva, I searched all sources for the company code for "CommVault Systems Inc" from 5/1/2013 to 4/30/2014. To eliminate duplicate stories for each of the news providers (Bloomberg and Factiva), a news story was considered a duplicate and eliminated if it had exactly the same date, timestamp, headline, news source, and lead paragraph as another news story from the same provider.

[1]	[2]	[3]	CommVault Com [4]	[5]
[1]				
Doto	Daily Volume	Weekly Volume	Shares Outstanding	Weekly Turnover
5/6/2013 Mon				
5/7/2013 Mon 5/7/2013 Tue	670,283			
	2,426,280			
5/8/2013 Wed	647,246			
5/9/2013 Thu 5/10/2013 Fri	613,102 394,006	4,750,917	46,480,599	10.2%
5/13/2013 Mon	488,163	4,730,917	40,460,399	10.270
5/14/2013 Tue	382,611			
5/15/2013 Tue 5/15/2013 Wed	485,158			
5/16/2013 Wed 5/16/2013 Thu	510,044			
5/17/2013 Fri	526,441	2,392,417	46,480,599	5.1%
5/20/2013 Mon	341,221	2,372,417		J.170
5/21/2013 Tue	344,679			
5/22/2013 Yed	1,267,364			
5/23/2013 Wed 5/23/2013 Thu	1,046,891			
5/24/2013 Fri	536,671	3,536,826	46,480,599	7.6%
5/28/2013 Tue	466,537	5,550,020		7.070
5/29/2013 Wed	231,600			
5/30/2013 Thu	300,783			
5/31/2013 Fri	281,820	1,280,740	46,480,599	2.8%
6/3/2013 Mon	409,886			
6/4/2013 Tue	515,449			
6/5/2013 Wed	305,230			
6/6/2013 Thu	347,630			
6/7/2013 Fri	207,763	1,785,958	46,480,599	3.8%
6/10/2013 Mon	227,524			
6/11/2013 Tue	316,385			
6/12/2013 Wed	309,990			
6/13/2013 Thu	396,981			
6/14/2013 Fri	707,352	1,958,232	46,480,599	4.2%
6/17/2013 Mon	525,754		· · · ·	
6/18/2013 Tue	706,961			
6/19/2013 Wed	621,656			
6/20/2013 Thu	442,225			
6/21/2013 Fri	742,914	3,039,510	46,480,599	6.5%
6/24/2013 Mon	631,587			
6/25/2013 Tue	343,682			
6/26/2013 Wed	595,405			
6/27/2013 Thu	451,169			
6/28/2013 Fri	749,667	2,771,510	46,480,599	6.0%
7/1/2013 Mon	451,169			
7/2/2013 Tue	344,587			
7/3/2013 Wed	178,873			
7/5/2013 Fri	257,377	1,232,006	46,650,052	2.6%
7/8/2013 Mon	254,116			
7/9/2013 Tue	516,767			
7/10/2013 Wed	588,452			

	rading Volume a			
[1]	[2]	[3]	[4]	[5]
	Daily	Weekly	Shares	Weekly
Date	Volume	Volume	Outstanding	Turnover
7/11/2013 Th	, , , , , , , , , , , , , , , , , , ,			
7/12/2013 Fri	•	1,990,630	46,650,052	4.3%
7/15/2013 Mo	,			
7/16/2013 Tu				
7/17/2013 We	•			
7/18/2013 Th	•			
7/19/2013 Fri	, , , , , , , , , , , , , , , , , , ,	2,369,216	46,650,052	5.1%
7/22/2013 Mo	•			
7/23/2013 Tu	•			
7/24/2013 We	*			
7/25/2013 Th	•	1.025.004		2.00/
7/26/2013 Fri		1,825,994	46,732,057	3.9%
7/29/2013 Mo	•			
7/30/2013 Tu				
7/31/2013 We	•			
8/1/2013 Th		5 011 072	46.732.057	10.70/
8/2/2013 Fri	· · · · · · · · · · · · · · · · · · ·	5,011,072	46,732,057	10.7%
8/5/2013 Mo	*			
8/6/2013 Tu	•			
8/7/2013 We	•			
8/8/2013 Th		1 001 726	46 722 057	4.00/
8/9/2013 Fri		1,891,726	46,732,057	4.0%
8/12/2013 Mo	•			
8/13/2013 Tu	•			
8/14/2013 We				
8/15/2013 Th 8/16/2013 Fri		1 466 424	46 722 057	3.1%
8/19/2013 Mg	•	1,466,434	46,732,057	3.170
8/20/2013 Tu	•			
8/21/2013 W	•			
8/22/2013 Th				
8/23/2013 Fri	*	1,514,690	46,732,057	3.2%
8/26/2013 Mg	•	1,514,090	40,732,037	3.270
8/27/2013 Tu				
8/28/2013 We	•			
8/29/2013 Th	•			
8/30/2013 Fri	•	1,307,792	46,732,057	2.8%
9/3/2013 Tu	•	1,507,752		2.070
9/4/2013 We	•			
9/5/2013 Th	, , , , , , , , , , , , , , , , , , ,			
9/6/2013 Fri	•	1,101,883	46,732,057	2.4%
9/9/2013 Mg		1,101,005		2.770
9/10/2013 Tu	•			
9/11/2013 We	•			
9/12/2013 Th				
9/13/2013 Fri	•	808,964	46,732,057	1.7%
7/13/2013 TH	117,000	550,704	10,732,037	1.//0

[1]	[2]	[3]	[4]	[5]
[*]				
Data	Daily Volume	Weekly Volume	Shares Outstanding	Weekly Turnover
9/16/2013 Mo		voiume	Outstanding	Turnover
9/17/2013 Tu	•			
9/18/2013 We	,			
9/19/2013 Th	,	1 524 560	46 722 057	2 20/
9/20/2013 Fri	•	1,534,560	46,732,057	3.3%
9/23/2013 Mo	•			
9/24/2013 Tu	,			
9/25/2013 We	,			
9/26/2013 Th 9/27/2013 Fri	,	1 467 162	46 722 057	2 10/
	,	1,467,162	46,732,057	3.1%
9/30/2013 Mo 10/1/2013 Tu	•			
10/1/2013 Tu	,			
10/2/2013 We 10/3/2013 Th	•			
10/3/2013 Tri 10/4/2013 Fri	,	1,704,285	47,075,000	3.6%
10/4/2013 FII 10/7/2013 Mo	•	1,704,263	47,073,000	3.070
10/7/2013 MC 10/8/2013 Tu	·			
10/8/2013 Tu				
10/9/2013 We 10/10/2013 Th				
10/11/2013 Fri	,	1 966 604	47.075.000	4.0%
10/11/2013 Fri 10/14/2013 Mo	,	1,866,604	47,075,000	4.070
10/15/2013 Mc	,			
10/15/2013 Tu				
10/17/2013 Th	•			
10/17/2013 Tii 10/18/2013 Fri	•	3,185,291	47,075,000	6.8%
10/21/2013 Ma	,	3,163,291	47,073,000	0.870
10/21/2013 We 10/22/2013 Tu				
10/23/2013 Tu	,			
10/24/2013 Th				
10/25/2013 Fri	•	2,082,174	47,282,467	4.4%
10/28/2013 Mc	,	2,002,174	77,202,407	
10/29/2013 Tu				
10/30/2013 We	, ,			
10/31/2013 Th				
11/1/2013 Fri	•	7,154,754	47,282,467	15.1%
11/4/2013 Mc	,	7,154,754		13.170
11/5/2013 Tu	•			
11/6/2013 We	,			
11/7/2013 Th	,			
11/8/2013 Fri	•	3,140,486	47,282,467	6.6%
11/11/2013 Mo	•			
11/11/2013 Tu	•			
11/13/2013 We	•			
11/14/2013 Th	•			
11/15/2013 Fri	•	2,178,191	47,282,467	4.6%
11/18/2013 Mo	•	-,-,0,171		
	30=,220			

[1]	[2]	[3]	<u> </u>	[5]
[*]				
Data	Daily Volume	Weekly Volume	Shares Outstanding	Weekly Turnover
Date 11/19/2013 Tue		voiume	Outstanding	Turnover
11/19/2013 Tue 11/20/2013 Wed	455,718			
	382,282			
11/21/2013 Thu	229,577	1 040 150	47 202 467	4 10/
11/22/2013 Fri	290,244	1,940,159	47,282,467	4.1%
11/25/2013 Mon 11/26/2013 Tue	611,725			
11/20/2013 Tue 11/27/2013 Wed	392,980 505,190			
11/29/2013 Wed 11/29/2013 Fri	196,528	1 706 422	47,282,467	3.6%
12/2/2013 F11 12/2/2013 Mon	367,643	1,706,423	47,202,407	3.070
12/3/2013 Moli 12/3/2013 Tue	480,314			
12/4/2013 Wed	737,740			
12/5/2013 Wed 12/5/2013 Thu	884,154			
12/6/2013 Fri	491,957	2,961,808	47,282,467	6.3%
12/9/2013 Mon	567,070	2,901,808	47,282,407	0.570
12/9/2013 Wolf 12/10/2013 Tue	650,676			
12/11/2013 Tue 12/11/2013 Wed	522,945			
12/11/2013 Wed 12/12/2013 Thu	977,748			
12/13/2013 Fri	660,476	3,378,915	47,282,467	7.1%
12/16/2013 Mon	795,869	3,376,913	47,202,407	7.170
12/17/2013 Tue	2,020,755			
12/17/2013 Tue 12/18/2013 Wed	958,963			
12/19/2013 Wed 12/19/2013 Thu	469,212			
12/20/2013 Fri	1,477,751	5,722,550	47,282,467	12.1%
12/23/2013 Mon	570,021	3,722,330		12.170
12/24/2013 Tue	244,691			
12/26/2013 Thu	295,174			
12/27/2013 Fri	327,195	1,437,081	47,282,467	3.0%
12/30/2013 Mon	364,834			
12/31/2013 Tue	378,248			
1/2/2014 Thu	732,541			
1/3/2014 Fri	358,335	1,833,958	47,390,000	3.9%
1/6/2014 Mon	585,028			
1/7/2014 Tue	585,544			
1/8/2014 Wed	589,727			
1/9/2014 Thu	690,539			
1/10/2014 Fri	594,995	3,045,833	47,390,000	6.4%
1/13/2014 Mon	1,104,005			
1/14/2014 Tue	766,981			
1/15/2014 Wed	1,100,199			
1/16/2014 Thu	1,592,755			
1/17/2014 Fri	584,608	5,148,548	47,390,000	10.9%
1/21/2014 Tue	659,573			
1/22/2014 Wed	384,576			
1/23/2014 Thu	678,380			
1/24/2014 Fri	929,600	2,652,129	47,495,325	5.6%
1/27/2014 Mon	715,600			

			Jomm vauit Com	
[1]	[2]	[3]	[4]	[5]
	Daily	Weekly	Shares	Weekly
Date	Volume	Volume	Outstanding	Turnover
1/28/2014 Tue	1,382,039			
1/29/2014 Wed	5,441,791			
1/30/2014 Thu	1,743,970			
1/31/2014 Fri	826,648	10,110,048	47,495,325	21.3%
2/3/2014 Mon	1,763,042			
2/4/2014 Tue	1,767,293			
2/5/2014 Wed	1,247,894			
2/6/2014 Thu	748,976			
2/7/2014 Fri	992,509	6,519,714	47,495,325	13.7%
2/10/2014 Mon	1,195,413			
2/11/2014 Tue	805,829			
2/12/2014 Wed	796,018			
2/13/2014 Thu	911,217			
2/14/2014 Fri	717,109	4,425,586	47,495,325	9.3%
2/18/2014 Tue	792,714			
2/19/2014 Wed	711,786			
2/20/2014 Thu	692,831			
2/21/2014 Fri	851,439	3,048,770	47,495,325	6.4%
2/24/2014 Mon	852,884			
2/25/2014 Tue	520,665			
2/26/2014 Wed	468,636			
2/27/2014 Thu	505,725			
2/28/2014 Fri	501,458	2,849,368	47,495,325	6.0%
3/3/2014 Mon	600,332			
3/4/2014 Tue	580,103			
3/5/2014 Wed	772,822			
3/6/2014 Thu	543,088	2 200 111	47 405 225	
3/7/2014 Fri	783,766	3,280,111	47,495,325	6.9%
3/10/2014 Mon	1,137,329			
3/11/2014 Tue	1,543,930			
3/12/2014 Wed	728,547			
3/13/2014 Thu	1,174,850	 5 176 691	47 405 225	10.00/
3/14/2014 Fri	592,028	5,176,684	47,495,325	10.9%
3/17/2014 Mon	787,483 963,449			
3/18/2014 Tue 3/19/2014 Wed	•			
3/20/2014 Wed 3/20/2014 Thu	1,450,252			
3/20/2014 Thu 3/21/2014 Fri	1,007,073 1,368,332	5,576,589	47 405 225	11.7%
3/24/2014 FII 3/24/2014 Mon		3,370,369	47,495,325	11./70
3/25/2014 Mon 3/25/2014 Tue	1,246,309 860,199			
3/26/2014 Tue 3/26/2014 Wed	991,618			
3/26/2014 Wed 3/27/2014 Thu	991,618 811,631			
3/28/2014 Thu 3/28/2014 Fri	769,180	4,678,937	47,495,325	9.9%
3/31/2014 Fri 3/31/2014 Mon	769,180 545,709	4,070,937	71,473,343	7.7 70
3/31/2014 Mon 4/1/2014 Tue				
4/1/2014 Tue 4/2/2014 Wed	1,172,686			
4/2/2014 Wed	453,585			

[1]	[2]	[3]	[4]	[5]
	Daily	Weekly	Shares	Weekly
Date	Volume	Volume	Outstanding	Turnover
4/3/2014 Thu	437,132			
4/4/2014 Fri	494,896	3,104,008	47,094,000	6.6%
4/7/2014 Mon	706,712			
4/8/2014 Tue	653,651			
4/9/2014 Wed	902,116			
4/10/2014 Thu	925,730			
4/11/2014 Fri	953,145	4,141,354	47,094,000	8.8%
4/14/2014 Mon	480,997			
4/15/2014 Tue	624,825			
4/16/2014 Wed	851,792			
4/17/2014 Thu	645,212	2,602,826	47,094,000	5.5%
4/21/2014 Mon	554,947			
4/22/2014 Tue	618,913			
4/23/2014 Wed	754,283			
4/24/2014 Thu	1,466,927			
4/25/2014 Fri	8,454,518	11,849,588	47,186,646	25.1%

Notes:

- [1] Trading date.
- [2] Reported composite U.S. volume. Source: Bloomberg.
- [3] Volume over entire week of trading.
- [4] Last available shares outstanding as of the end of each week. Source: SEC filings.
- [5] Weekly turnover = [3] / [4].

Appendix E Weekly Analyst Coverage of CommVault

[1]		[2]	[3]
[-]		Bloomberg Total Analyst	Number of Analysts in Thomson
Date		Recommendations	Reuters I/B/E/S Consensus
5/10/2013	Fri	16	16
5/17/2013	Fri	16	16
5/24/2013	Fri	16	16
5/31/2013	Fri	16	15
6/7/2013	Fri	16	16
6/14/2013	Fri	16	17
6/21/2013	Fri	16	17
6/28/2013	Fri	16	17
7/5/2013	Fri	16	17
7/12/2013	Fri	16	18
7/19/2013	Fri	16	18
7/26/2013	Fri	16	18
8/2/2013	Fri	16	17
8/9/2013	Fri	16	17
8/16/2013	Fri	16	17
8/23/2013	Fri	16	17
8/30/2013	Fri	16	17
9/6/2013	Fri	16	17
9/13/2013	Fri	16	17
9/20/2013	Fri	16	17
9/27/2013	Fri	16	17
10/4/2013	Fri	16	17
10/11/2013	Fri	16	17
10/18/2013	Fri	16	17
10/25/2013	Fri	16	17
11/1/2013	Fri	16	18
11/8/2013	Fri	16	17
11/15/2013	Fri	15	17
11/22/2013	Fri	15	16
11/29/2013	Fri	16	17
12/6/2013	Fri	18	19
12/13/2013	Fri	18	19
12/20/2013	Fri	18	19
12/27/2013	Fri	18	19
1/3/2014	Fri	17	19
1/10/2014 1/17/2014	Fri	17	19 20
	Fri	18	20 20
1/24/2014 1/31/2014	Fri Fri	18 18	20 20
2/7/2014	Fri Fri	18 18	20 20
2/14/2014	Fri	18	20
2/21/2014	Fri	18	19
2/28/2014	Fri	18	18
3/7/2014	Fri	18	18
3/14/2014	Fri	18	18
5/17/2014	1 11	10	10

Appendix E Weekly Analyst Coverage of CommVault

[1]		[2]	[3]	
		Bloomberg Total Analyst	Number of Analysts in Thomson	
Date		Recommendations	Reuters I/B/E/S Consensus	
3/21/2014	Fri	18	18	
3/28/2014	Fri	18	18	
4/4/2014	Fri	18	18	
4/11/2014	Fri	18	18	
4/17/2014	Thu	18	18	
4/25/2014	Fri	19	19	

Notes:

- [1] Last trading day of a week during the Class Period (including the corrective disclosure date of April 25, 2014).
- [2] Most recent available Bloomberg total analyst recommendations. Bloomberg defines "total analyst recommendations" as the total number of analysts making recommendations for the security. Source: Bloomberg.
- [3] Number of analysts in Thomson Reuters I/B/E/S consensus EPS estimates for current fiscal year. Source: S&P Capital IQ.

Appendix F
Daily Bid-Ask Spread in CommVault Common Stock

[11]	r41	[2]
[1]	[1]	[2]
Date	Time-Weighted Average Bid-Ask Spread (\$)	Time-Weighted Average Bid-Ask Spread (%)
5/7/2013	\$0.13	0.16%
	\$0.13 \$0.07	
5/8/2013		0.09%
5/9/2013	\$0.06	0.08%
5/10/2013	\$0.07	0.10%
5/13/2013	\$0.07	0.10%
5/14/2013	\$0.08	0.11%
5/15/2013	\$0.06	0.09%
5/16/2013	\$0.07	0.09%
5/17/2013	\$0.08	0.11%
5/20/2013	\$0.07	0.10%
5/21/2013	\$0.08	0.10%
5/22/2013	\$0.08	0.11%
5/23/2013	\$0.08	0.11%
5/24/2013	\$0.08	0.12%
5/28/2013	\$0.07	0.10%
5/29/2013	\$0.09	0.13%
5/30/2013	\$0.10	0.15%
5/31/2013	\$0.12	0.17%
6/3/2013	\$0.11	0.16%
6/4/2013	\$0.09	0.13%
6/5/2013	\$0.13	0.18%
6/6/2013	\$0.14	0.20%
6/7/2013	\$0.10	0.14%
6/10/2013	\$0.08	0.12%
6/11/2013	\$0.10	0.14%
6/12/2013	\$0.11	0.16%
6/13/2013	\$0.10	0.14%
6/14/2013	\$0.09	0.12%
6/17/2013	\$0.09	0.12%
6/18/2013	\$0.08	0.11%
6/19/2013	\$0.08	0.11%
6/20/2013	\$0.10	0.14%
6/21/2013	\$0.12	0.15%
6/24/2013	\$0.10	0.14%
6/25/2013	\$0.14	0.18%
6/26/2013	\$0.10	0.12%
6/27/2013	\$0.10	0.13%
6/28/2013	\$0.10	0.13%
7/1/2013	\$0.09	0.12%
7/2/2013	\$0.10	0.13%
7/3/2013	\$1.39	1.79%
7/5/2013	\$0.13	0.16%
7/8/2013	\$0.09	0.11%
7/9/2013	\$0.09	0.12%
7/10/2013	\$0.09	0.11%
7/11/2013	\$0.10	0.12%

Appendix F
Daily Bid-Ask Spread in CommVault Common Stock

[1]	[1]	[2]
Data	Time-Weighted Average Bid-Ask Spread (\$)	Time-Weighted Average
Date 7/12/2013		Bid-Ask Spread (%)
	\$0.11	
7/15/2013	\$0.09	0.12%
7/16/2013	\$0.09	0.11%
7/17/2013	\$0.09	0.11%
7/18/2013	\$0.09	0.12%
7/19/2013	\$0.09	0.11%
7/22/2013	\$0.08	0.11%
7/23/2013	\$0.08	0.10%
7/24/2013	\$0.08	0.10%
7/25/2013	\$0.10	0.13%
7/26/2013	\$0.10	0.12% 0.14%
7/29/2013	\$0.10	0.14%
7/30/2013	\$0.11	
7/31/2013	\$0.08	0.10%
8/1/2013	\$0.09	0.10%
8/2/2013	\$0.09	0.10%
8/5/2013	\$0.09	0.11%
8/6/2013	\$0.09	0.10%
8/7/2013	\$0.10	0.11%
8/8/2013	\$0.11	0.13%
8/9/2013	\$0.12	0.13%
8/12/2013	\$0.11	0.13%
8/13/2013	\$0.13	0.15%
8/14/2013	\$0.13	0.15%
8/15/2013	\$0.12	0.14%
8/16/2013	\$0.13	0.15% 0.14%
8/19/2013	\$0.11	
8/20/2013	\$0.16	0.19%
8/21/2013 8/22/2013	\$0.14 \$0.15	0.17% 0.18%
8/23/2013	\$0.12	0.14%
8/26/2013 8/27/2013	\$0.14 \$0.14	0.16% 0.16%
		0.10%
8/28/2013	\$0.10 \$0.16	
8/29/2013		0.18% 0.20%
8/30/2013	\$0.17	
9/3/2013	\$0.16	0.19%
9/4/2013	\$0.14	0.17%
9/5/2013	\$0.14 \$0.15	0.17%
9/6/2013	\$0.15	0.18%
9/9/2013	\$0.17	0.20%
9/10/2013	\$0.17	0.19%
9/11/2013	\$0.15	0.17%
9/12/2013	\$0.13	0.16%
9/13/2013	\$0.14	0.16%
9/16/2013	\$0.20	0.23%

Appendix F
Daily Bid-Ask Spread in CommVault Common Stock

[1]	[1]	[2]
	Time-Weighted Average	Time-Weighted Average
Date	Bid-Ask Spread (\$)	Bid-Ask Spread (%)
9/17/2013	\$0.13	0.15%
9/18/2013	\$0.13	0.15%
9/19/2013	\$0.15	0.17%
9/20/2013	\$0.13	0.15%
9/23/2013	\$0.16	0.18%
9/24/2013	\$0.15	0.17%
9/25/2013	\$0.17	0.20%
9/26/2013	\$0.13	0.15%
9/27/2013	\$0.17	0.20%
9/30/2013	\$0.17	0.20%
10/1/2013	\$0.15	0.16%
10/2/2013	\$0.13	0.15%
10/3/2013	\$0.20	0.23%
10/4/2013	\$0.15	0.17%
10/7/2013	\$0.17	0.20%
10/8/2013	\$0.17	0.20%
10/9/2013	\$0.17	0.19%
10/10/2013	\$0.14	0.17%
10/11/2013	\$0.15	0.18%
10/14/2013	\$0.18	0.21%
10/15/2013	\$0.15	0.18%
10/16/2013	\$0.11	0.14%
10/17/2013	\$0.13	0.15%
10/18/2013	\$0.12	0.14%
10/21/2013	\$0.12	0.14%
10/22/2013	\$0.14	0.16%
10/23/2013	\$0.15	0.18%
10/24/2013	\$0.12	0.14%
10/25/2013	\$0.12	0.14%
10/28/2013	\$0.09	0.10%
10/29/2013	\$0.12	0.15%
10/30/2013	\$0.06	0.07%
10/31/2013	\$0.11	0.14%
11/1/2013	\$0.10	0.13%
11/4/2013	\$0.09	0.12%
11/5/2013	\$0.09	0.12%
11/6/2013	\$0.11	0.14%
11/7/2013	\$0.12	0.15%
11/8/2013	\$0.13	0.17%
11/11/2013	\$0.13	0.17%
11/12/2013	\$0.10	0.14%
11/13/2013	\$0.12	0.16%
11/14/2013	\$0.13	0.18%
11/15/2013	\$0.10	0.13%
11/18/2013	\$0.10	0.13%
11/19/2013	\$0.11	0.15%

Appendix F
Daily Bid-Ask Spread in CommVault Common Stock

[1]	[1]	[2]
. ,	Time-Weighted Average	Time-Weighted Average
Date	Bid-Ask Spread (\$)	Bid-Ask Spread (%)
11/20/2013	\$0.12	0.17%
11/21/2013	\$0.12	0.15%
11/22/2013	\$0.12	0.15%
11/25/2013	\$0.09	0.12%
11/26/2013	\$0.10	0.12%
11/27/2013	\$0.09	0.11%
11/29/2013	\$1.14	1.36%
12/2/2013	\$0.12	0.16%
12/3/2013	\$0.10	0.13%
12/4/2013	\$0.11	0.15%
12/5/2013	\$0.08	0.11%
12/6/2013	\$0.11	0.15%
12/9/2013	\$0.08	0.11%
12/10/2013	\$0.08	0.11%
12/11/2013	\$0.10	0.14%
12/12/2013	\$0.07	0.11%
12/13/2013	\$0.09	0.13%
12/16/2013	\$0.06	0.09%
12/17/2013	\$0.07	0.09%
12/18/2013	\$0.07	0.10%
12/19/2013	\$0.09	0.12%
12/20/2013	\$0.07	0.10%
12/23/2013	\$0.09	0.12%
12/24/2013	\$0.51	0.74%
12/26/2013	\$0.13	0.17%
12/27/2013	\$0.10	0.13%
12/30/2013	\$0.09	0.12%
12/31/2013	\$0.09	0.12%
1/2/2014	\$0.07	0.09%
1/3/2014	\$0.09	0.12%
1/6/2014	\$0.09	0.13%
1/7/2014	\$0.12	0.16%
1/8/2014	\$0.11	0.14%
1/9/2014	\$0.10	0.13%
1/10/2014	\$0.08	0.11%
1/13/2014	\$0.08	0.11%
1/14/2014	\$0.06	0.08%
1/15/2014	\$0.05	0.07%
1/16/2014	\$0.07	0.10%
1/17/2014	\$0.09	0.12%
1/21/2014	\$0.08	0.11%
1/22/2014	\$0.08	0.11%
1/23/2014	\$0.06	0.08%
1/24/2014 1/27/2014	\$0.07 \$0.08	0.10% 0.11%
1/28/2014	\$0.08 \$0.10	0.11%
1/20/2014	φυ.10	0.1370

Appendix F
Daily Bid-Ask Spread in CommVault Common Stock

[1]	[1]	[2]
.	Time-Weighted Average	Time-Weighted Average
Date 1/20/2014	Bid-Ask Spread (\$)	Bid-Ask Spread (%)
1/29/2014	\$0.08	0.11%
1/30/2014	\$0.06	0.09%
1/31/2014	\$0.09	0.13%
2/3/2014	\$0.08	0.12%
2/4/2014	\$0.06	0.09%
2/5/2014	\$0.07	0.11%
2/6/2014	\$0.09	0.14%
2/7/2014	\$0.09	0.14%
2/10/2014	\$0.07	0.10%
2/11/2014	\$0.06	0.09%
2/12/2014	\$0.07	0.11%
2/13/2014	\$0.08	0.12%
2/14/2014	\$0.08	0.12%
2/18/2014	\$0.07	0.10%
2/19/2014	\$0.09	0.12%
2/20/2014	\$0.08	0.12%
2/21/2014	\$0.07	0.11%
2/24/2014	\$0.06	0.09%
2/25/2014	\$0.07	0.10%
2/26/2014	\$0.09	0.13%
2/27/2014	\$0.09	0.13%
2/28/2014	\$0.08	0.11%
3/3/2014	\$0.06	0.09%
3/4/2014	\$0.07	0.10%
3/5/2014	\$0.06	0.08%
3/6/2014	\$0.08	0.11%
3/7/2014	\$0.07	0.11%
3/10/2014	\$0.07	0.11%
3/11/2014	\$0.06	0.09%
3/12/2014	\$0.06	0.09%
3/13/2014	\$0.06	0.10%
3/14/2014	\$0.07	0.12%
3/17/2014	\$0.07	0.11%
3/18/2014	\$0.05	0.07%
3/19/2014	\$0.05	0.08%
3/20/2014	\$0.05	0.07%
3/21/2014	\$0.06	0.09%
3/24/2014	\$0.06	0.09%
3/25/2014	\$0.08	0.11%
3/26/2014	\$0.08	0.11%
3/27/2014	\$0.09	0.13%
3/28/2014	\$0.07	0.11%
3/31/2014	\$0.08	0.12%
4/1/2014	\$0.06	0.09%
4/2/2014	\$0.08	0.12%
4/3/2014	\$0.10	0.14%

Appendix F
Daily Bid-Ask Spread in CommVault Common Stock

[1]	[1]	[2]
	Time-Weighted Average	Time-Weighted Average
Date	Bid-Ask Spread (\$)	Bid-Ask Spread (%)
4/4/2014	\$0.10	0.15%
4/7/2014	\$0.11	0.16%
4/8/2014	\$0.10	0.15%
4/9/2014	\$0.08	0.12%
4/10/2014	\$0.09	0.13%
4/11/2014	\$0.08	0.13%
4/14/2014	\$0.09	0.14%
4/15/2014	\$0.09	0.15%
4/16/2014	\$0.09	0.14%
4/17/2014	\$0.07	0.12%
4/21/2014	\$0.07	0.11%
4/22/2014	\$0.05	0.08%
4/23/2014	\$0.08	0.11%
4/24/2014	\$0.10	0.15%

Notes:

See Section V.C.3 in the report for methodology.

Source:

Tick Data.

Appendix G CommVault Common Stock Data

								Stock D					
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
					Excess		Coefficien						
TD .4	** *	ъ.	D /	Market	Industry	T .	. 3.5 1 .	Excess		Abnormal	Root		** *
Date	Volume	Price	Return 0.43%	Return		Intercep			Return	Return	MSE	t-statistic	p-Value
5/6/13	670,283	\$77.82		0.43%	-0.30%	0.00	1.69	0.79	0.39%	0.04%	0.02	0.02	98.17%
5/7/13	2,426,280	\$76.33	-1.91%	0.11%	0.39%	0.00	1.69	0.80	0.40%	-2.32%	0.02	-1.36	17.76%
5/8/13	647,246	\$77.49	1.52%	0.49%	-0.05%	0.00	1.70	0.81	0.68%	0.84%	0.02	0.49	62.21%
5/9/13	613,102	\$75.02	-3.19%	-0.06%	-0.67%	0.00	1.70	0.81	-0.75%	-2.43%	0.02	-1.42	15.75%
5/10/13	394,006	\$75.41	0.52%	0.80%	-0.04%	0.00	1.70	0.85	1.21%	-0.69%	0.02	-0.40	68.93%
5/13/13	488,163	\$73.82	-2.11%	0.07%	-0.61%	0.00	1.70	0.85	-0.53%	-1.58%	0.02	-0.91	36.30%
5/14/13	382,611	\$74.27	0.61%	0.74%	0.36%	0.00	1.69	0.92	1.41%	-0.80%	0.02	-0.47	64.13%
5/15/13	485,158	\$73.38	-1.20%	0.27%	-0.22%	0.00	1.69	0.91	0.07%	-1.27%	0.02	-0.74	45.84%
5/16/13	510,044	\$74.36	1.34%	-0.18%	0.90%	0.00	1.68	0.88	0.31%	1.02%	0.02	0.60	55.10%
5/17/13	526,441	\$74.80	0.59%	0.97%	-0.29%	0.00	1.68	0.91	1.22%	-0.62%	0.02	-0.36	71.60%
5/20/13	341,221	\$74.44	-0.48%	-0.07%	0.16%	0.00	1.70	0.91	-0.13%	-0.35%	0.02	-0.21	83.78%
5/21/13	344,679	\$73.19	-1.68%	0.17%	0.08%	0.00	1.69	0.90	0.16%	-1.84%	0.02	-1.13	26.06%
5/22/13	1,267,364	\$67.09	-8.33%	-1.11%	-1.41%	0.00	1.69	0.89	-3.33%	-5.00%	0.02	-3.05	0.28% **
5/23/13	1,046,891	\$70.60	5.23%	-0.10%	0.80%	0.00	1.77	1.07	0.39%	4.84%	0.02	2.86	0.51% **
5/24/13	536,671	\$69.15	-2.05%	-0.01%	-0.15%	0.00	1.78	1.15	-0.41%	-1.64%	0.02	-0.95	34.64%
5/28/13	466,537	\$71.11	2.83%	0.86%	0.33%	0.00	1.79	1.16	1.69%	1.15%	0.02	0.66	51.25%
5/29/13	231,600	\$69.84	-1.79%	-0.60%	-0.04%	0.00	1.81	1.17	-1.39%	-0.40%	0.02	-0.23	81.82%
5/30/13	300,783	\$71.40	2.23%	0.69%	0.76%	0.00	1.82	1.17	1.89%	0.35%	0.02	0.20	84.23%
5/31/13	281,820	\$70.06	-1.88%	-1.01%	0.38%	0.00	1.84	1.23	-1.67%	-0.21%	0.02	-0.12	90.18%
6/3/13	409,886	\$70.40	0.49%	0.29%	-0.46%	0.00	1.85	1.23	-0.29%	0.78%	0.02	0.45	65.20%
6/4/13	515,449	\$70.98	0.82%	-0.58%	-0.08%	0.00	1.86	1.22	-1.43%	2.25%	0.02	1.31	19.40%
6/5/13	305,230	\$69.83	-1.62%	-1.26%	0.47%	0.00	1.83	1.19	-2.00%	0.38%	0.02	0.22	82.78%
6/6/13	347,630	\$69.80	-0.04%	0.67%	0.67%	0.00	1.83	1.20	1.78%	-1.83%	0.02	-1.06	29.35%
6/7/13	207,763	\$71.37	2.25%	1.32%	-0.21%	0.00	1.81	1.17	1.90%	0.35%	0.02	0.20	84.13%
6/10/13	227,524	\$72.46	1.53%	0.13%	-0.70%	0.00	1.83	1.17	-0.84%	2.37%	0.02	1.36	17.59%
6/11/13	316,385	\$71.88	-0.80%	-1.06%	-0.44%	0.00	1.83	1.12	-2.66%	1.86%	0.02	1.06	28.94%
6/12/13	309,990	\$71.98	0.14%	-1.03%	0.25%	0.00	1.80	1.10	-1.80%	1.94%	0.02	1.11	27.10%
6/13/13	396,981	\$74.04	2.86%	1.32%	0.14%	0.00	1.77	1.11	2.29%	0.57%	0.02	0.32	74.69%
6/14/13	707,352	\$75.27	1.66%	-0.63%	0.32%	0.00	1.78	1.11	-0.98%	2.64%	0.02	1.50	13.70%
6/17/13	525,754	\$76.91	2.18%	0.84%	0.49%	0.00	1.76	1.12	1.83%	0.34%	0.02	0.19	84.68%
6/18/13	706,961	\$78.80	2.46%	0.87%	-0.60%	0.00	1.76	1.13	0.66%	1.79%	0.02	1.01	31.51%
6/19/13	621,656	\$77.03	-2.25%	-1.12%	0.17%	0.00	1.77	1.10	-1.97%	-0.27%	0.02	-0.15	87.85%
6/20/13	442,225	\$76.00	-1.34%	-2.28%	0.09%	0.00	1.77	1.10	-4.11%	2.77%	0.02	1.55	12.30%
6/21/13	742,914	\$77.12	1.47%	-0.22%	-0.60%	0.00	1.69	1.09	-1.16%	2.63%	0.02	1.46	14.63%
6/24/13	631,587	\$76.57	-0.71%	-1.09%	-0.07%	0.00	1.66	1.06	-1.98%	1.26%	0.02	0.70	48.73%
6/25/13	343,682	\$77.01	0.57% 2.56%	0.82%	-0.42%	0.00	1.61	1.09	0.77%	-0.19%	0.02	-0.11	91.56%
6/26/13	595,405	\$78.98		0.87%	0.18%	0.00	1.64	1.08	1.54%	1.02%	0.02	0.56	57.32%
6/27/13	451,169	\$79.73	0.95% -4.82%	0.77% 0.04%	1.49% -0.30%	0.00 0.00	1.65	1.07	2.80% -0.33%	-1.85% -4.49%	0.02	-1.02	30.82% 1.45% *
6/28/13	749,667	\$75.89					1.63	1.00			0.02	-2.48	
7/1/13 7/2/13	451,169	\$76.10	0.28%	0.95%	0.13% -0.68%	0.00	1.62 1.60	1.01 1.04	1.56% -0.85%	-1.28% 0.09%	0.02	-0.70 0.05	48.39% 96.13%
7/3/13	344,587 178,873	\$75.52 \$76.97	-0.76% 1.92%	-0.03% 0.30%	0.22%	0.00			0.58%		0.02		45.78%
7/5/13	257,377	\$78.97	2.60%	1.04%	1.07%	0.00	1.59 1.59	1.00 1.00	2.62%	1.34% -0.03%	0.02 0.02	0.75 -0.01	98.84%
	254,116								0.50%				
7/8/13 7/9/13	516,767	\$77.65 \$79.76	-1.67% 2.71%	0.16% 0.56%	0.31% 0.18%	0.00	1.60 1.59	1.05 1.04	0.98%	-2.17% 1.74%	0.02 0.02	-1.21 0.96	23.06% 33.85%
	588,452	\$81.19	1.80%	0.36%	0.18%		1.61	1.04	0.94%	0.85%	0.02	0.47	63.96%
7/10/13 7/11/13	336,652	\$81.19	0.87%	1.64%	-0.07%	0.00	1.61	1.04	0.94% 2.48%	0.85% -1.61%	0.02	-0.89	37.77%
7/11/13	294,643	\$81.58	-0.39%	0.61%			1.51		0.72%	-1.01% -1.11%			
7/12/13	467,047	\$80.84	-0.39% -0.91%	0.01%	-0.15% 0.29%	0.00	1.58	1.05 1.06	0.72%	-1.11%	0.02 0.02	-0.61 -0.79	54.38% 43.29%
		\$79.15	-0.91%		-0.04%				-0.58%			-0.79 -0.83	43.29%
7/16/13 7/17/13	563,138	\$79.15	-2.09% 1.06%	-0.25%		0.00	1.57	1.09	0.30%	-1.51% 0.76%	0.02		
	428,342			0.32%	-0.04%	0.00	1.58	1.09		0.76%	0.02	0.42	67.47%
7/18/13	503,186 407,503	\$79.81	-0.23%	0.04%	0.43%	0.00	1.59	1.04	0.33%	-0.55% 1.07%	0.02	-0.31	75.92% 55.04%
7/19/13		\$80.51	0.88%	-0.66%	0.85%	0.00	1.61	1.20	-0.19%		0.02	0.60	55.04%
7/22/13	367,515	\$78.92	-1.97%	0.36%	-0.26%	0.00	1.61	1.22	0.13%	-2.10%	0.02	-1.18	24.02%
7/23/13	352,970	\$78.51	-0.52%	-0.59%	0.44%	0.00	1.60	1.19	-0.54%	0.02%	0.02	0.01	99.06%
7/24/13	289,417	\$80.76	2.87%	0.01%	-0.09%	0.00	1.59	1.19	-0.22%	3.09%	0.02	1.74	8.44%
7/25/13	338,894	\$80.89	0.16%	0.72%	-0.58%	0.00	1.59	1.19	0.35%	-0.19%	0.02	-0.10	91.76%

Appendix G
CommVault Common Stock Data

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
					Excess		Coefficien						
D 4	*7.1	ъ.	D /		Industry	T .	. 3.5 1 .			Abnormal	Root		*7 *
Date	Volume	Price	Return	Return			t Market		Return	Return	MSE	t-statistic	p-Value
7/26/13	477,198	\$78.56	-2.88%	0.22%	-2.50%	0.00	1.57	1.19	-2.73%	-0.15%	0.02	-0.08	93.41%
7/29/13 7/30/13	911,688 2,108,195	\$77.57 \$85.04	-1.26% 9.63%	-0.38% 0.49%	0.25% 0.06%	0.00	1.60 1.65	1.19 1.13	-0.44% 0.76%	-0.82% 8.87%	0.02 0.02	-0.46 5.02	64.67% 0.00% **
7/31/13	601,602	\$84.40	-0.75%	0.49%	0.00%	0.00	1.65	1.15	1.45%	-2.21%	0.02	-1.25	21.37%
8/1/13	802,808	\$87.72	3.93%	1.36%	2.50%	0.00	1.64	1.13	4.88%	-0.95%	0.02	-0.54	59.33%
8/2/13	586,779	\$87.75	0.03%	0.38%	-0.83%	0.00	1.59	1.08	-0.43%	0.47%	0.02	0.27	79.04%
8/5/13	388,786	\$87.83	0.05%	0.12%	0.00%	0.00	1.59	1.06	0.07%	0.02%	0.02	0.01	99.13%
8/6/13	469,864	\$88.51	0.77%	-0.73%	-0.86%	0.00	1.59	1.07	-2.19%	2.97%	0.02	1.70	9.15%
8/7/13	425,634	\$87.55	-1.08%	-0.32%	-0.42%	0.00	1.55	1.04	-1.03%	-0.06%	0.02	-0.03	97.48%
8/8/13	367,913	\$86.63	-1.05%	0.47%	0.35%	0.00	1.55	1.04	1.00%	-2.05%	0.02	-1.17	24.62%
8/9/13	239,529	\$86.34	-0.33%	-0.25%	0.33%	0.00	1.53	1.07	-0.13%	-0.21%	0.02	-0.12	90.52%
8/12/13	179,504	\$87.15	0.94%	0.27%	0.53%	0.00	1.54	1.07	0.89%	0.05%	0.02	0.03	97.70%
8/13/13	131,758	\$86.64	-0.59%	0.43%	0.15%	0.00	1.57	1.06	0.73%	-1.32%	0.02	-0.75	45.23%
8/14/13	175,127	\$86.08	-0.65%	-0.40%	0.02%	0.00	1.54	1.07	-0.70%	0.05%	0.02	0.03	97.77%
8/15/13	574,389	\$82.72	-3.90%	-1.72%	-0.42%	0.00	1.53	1.07	-3.19%	-0.72%	0.02	-0.41	68.19%
8/16/13	405,656	\$82.07	-0.79%	-0.09%	0.15%	0.00	1.53	1.08	-0.09%	-0.69%	0.02	-0.40	69.16%
8/19/13	349,997	\$81.90	-0.21%	-0.38%	-0.16%	0.00	1.54	1.06	-0.86%	0.65%	0.02	0.37	70.84%
8/20/13	253,172	\$82.75	1.04%	0.69%	0.01%	0.00	1.53	1.06	0.96%	0.08%	0.02	0.04	96.57%
8/21/13	296,064	\$83.02	0.33%	-0.38%	-0.58%	0.00	1.53	1.06	-1.31%	1.63%	0.02	0.94	35.14%
8/22/13	310,571	\$86.32	3.97%	1.08%	-0.06%	0.00	1.52	1.03	1.50%	2.48%	0.02	1.41	16.00%
8/23/13	304,886	\$85.52	-0.93%	0.52%	-0.32%	0.00	1.55	1.01	0.40%	-1.33%	0.02	-0.76	45.16%
8/26/13	213,550	\$86.31	0.92%	0.00%	0.30%	0.00	1.56	1.02	0.21%	0.71%	0.02	0.41	68.60%
8/27/13	274,626	\$83.42	-3.35%	-2.16%	-0.37%	0.00	1.57	1.00	-3.84%	0.50%	0.02	0.28	77.88%
8/28/13	413,528	\$85.35	2.31%	0.42%	-0.23%	0.00	1.55	1.00	0.35%	1.96%	0.02	1.11	26.77%
8/29/13	143,024	\$85.65	0.35%	0.75%	-0.35%	0.00	1.56	0.99	0.77%	-0.42%	0.02	-0.24	81.43%
8/30/13	263,064	\$83.83	-2.12%	-0.83%	-0.45%	0.00	1.56	0.99	-1.80%	-0.33%	0.02	-0.19	85.28%
9/3/13	495,756	\$83.06	-0.92%	0.63%	-0.67%	0.00	1.56	1.01	0.26%	-1.18%	0.02	-0.67	50.69%
9/4/13	230,419	\$84.38	1.59%	1.02%	0.13%	0.00	1.55	1.02	1.63%	-0.04%	0.02	-0.02	98.20%
9/5/13	200,531	\$85.26	1.04%	0.27%	0.45%	0.00	1.52	0.95	0.70%	0.34%	0.02	0.21	83.22%
9/6/13	175,177	\$84.57	-0.81%	0.04%	-0.22%	0.00	1.52	0.96	-0.28%	-0.53%	0.02	-0.33	74.55%
9/9/13	104,518	\$85.60	1.22%	1.27%	0.45%	0.00	1.52	0.95	2.22%	-1.00%	0.02	-0.62	53.82%
9/10/13	163,730	\$86.99	1.62%	0.62%	1.21%	0.00	1.51	0.94	1.93%	-0.30%	0.02	-0.19	85.17%
9/11/13	174,628	\$86.52	-0.54%	-0.10%	0.48%	0.00	1.50	0.94	0.16%	-0.70%	0.02	-0.43	66.77%
9/12/13	216,228	\$85.03	-1.72%	-0.24%	0.23%	0.00	1.51	0.93	-0.31%	-1.41%	0.02	-0.87	38.67%
9/13/13	149,860	\$85.01	-0.02%	0.17%	-0.20%	0.00	1.51	0.94	-0.11%	0.08%	0.02	0.05	95.87%
9/16/13	183,458	\$85.08	0.08%	-0.12%	0.45%	0.00	1.51	0.94	0.07%	0.01%	0.02	0.01	99.29%
9/17/13	257,609	\$86.85	2.08%	0.75%	-0.06%	0.00	1.51	0.94	0.89%	1.19%	0.02	0.73	46.66%
9/18/13	224,642	\$88.42	1.81%	1.01%	-0.31%	0.00	1.52	0.92	1.07%	0.74%	0.02	0.45	65.22%
9/19/13	190,880	\$88.28	-0.16%	0.15%	-0.19%	0.00	1.53	0.95	-0.10%	-0.06%	0.02	-0.03	97.23%
9/20/13	677,971	\$87.39	-1.01%	-0.39%	0.14%	0.00	1.54	0.96	-0.62%	-0.39%	0.02	-0.24	81.02%
9/23/13	256,917	\$87.38	-0.01%	-0.25%	-0.31%	0.00	1.54	0.96	-0.85%	0.84%	0.02	0.52	60.31%
9/24/13	296,140	\$85.27	-2.41%	0.08%	-0.09%	0.00	1.49	0.93	-0.10%	-2.32%	0.02	-1.46	14.69%
9/25/13	230,440	\$86.92	1.94%	-0.19%	0.65%	0.00	1.49	0.92	0.18%	1.76%	0.02	1.10	27.40%
9/26/13	425,594	\$88.95	2.34%	0.72%	0.12%	0.00	1.46	0.89	1.06%	1.28%	0.02	0.81	42.17%
9/27/13	258,071	\$87.21	-1.96%	-0.15%	-0.42%	0.00	1.46	0.90	-0.69%	-1.27%	0.02	-0.80	42.52%
9/30/13	249,218	\$87.92	0.81%	-0.26%	-0.01%	0.00	1.47	0.91	-0.49%	1.30%	0.02	0.82	41.49%
10/1/13	531,133	\$89.45	1.74%	1.25%	0.02%	0.00	1.50	0.93	1.82%	-0.08%	0.02	-0.05	95.95%
10/2/13	383,855	\$88.87	-0.65%	-0.08%	0.18%	0.00	1.50	0.87	-0.01%	-0.64%	0.02	-0.41	68.32%
10/3/13	301,310	\$87.50	-1.54%	-1.07%	-0.21%	0.00	1.52	0.87	-1.88%	0.34%	0.02	0.22	82.60%
10/4/13	238,769	\$88.86	1.55%	0.89%	-0.06%	0.00	1.49	0.88	1.20%	0.36%	0.02	0.23	81.64%
10/7/13	376,912	\$87.87	-1.11%		-0.51%	0.00	1.48	0.88	-1.96%	0.85%	0.02	0.55	58.00%
10/8/13	462,083	\$86.05	-2.07%	-2.00%	0.31%	0.00	1.50	0.86	-2.82%	0.74%	0.02	0.49	62.76%
10/9/13	434,897	\$84.60	-1.69%	-0.45%	0.18%	0.00	1.47	0.87	-0.57%	-1.12%	0.02	-0.73	46.64%
10/10/13	297,452	\$85.99	1.64%	2.26%	0.27%	0.00	1.47	0.88	3.48%	-1.84%	0.02	-1.20	23.26%
10/11/13	295,260	\$87.20	1.41%	0.83%	0.25%	0.00	1.40	0.89	1.30%	0.11%	0.02	0.07	94.51%
10/14/13	232,121	\$87.73	0.61%	0.62%	-0.50%	0.00	1.40	0.89	0.33%	0.27%	0.02	0.18	85.87%
10/15/13	1,579,129	\$81.69	-6.88%	-0.56%	-1.52%	0.00	1.40	0.87	-2.20%	-4.68%	0.02	-3.05	0.29% **

Appendix G CommVault Common Stock Data

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
				M . 1 . 4	Excess		Coefficien		D. P. 4. 1	A1 1	Dest		
Date	Volume	Price	Return	Return	Industry Return	Intercep	t Market			Abnormal Return	Root MSE	t-statistic	p-Value
10/16/13	525,512	\$83.37	2.06%	1.20%	-0.05%	0.00	1.43	1.07	1.53%	0.53%	0.02	0.33	74.11%
10/17/13	480,845	\$85.67	2.76%	0.62%	-0.27%	0.00	1.43	1.08	0.48%	2.28%	0.02	1.44	15.22%
10/18/13	367,684	\$87.33	1.94%	1.32%	-0.05%	0.00	1.44	1.06	1.76%	0.18%	0.02	0.11	90.92%
10/21/13	407,519	\$87.49	0.18%	0.15%	0.36%	0.00	1.46	1.08	0.52%	-0.34%	0.02	-0.21	83.29%
10/22/13	468,536	\$86.96	-0.61%	0.24%	0.18%	0.00	1.46	1.07	0.46%	-1.07%	0.02	-0.67	50.39%
10/23/13	399,219	\$85.74	-1.40%	-0.57%	-0.47%	0.00	1.34	1.28	-1.50%	0.10%	0.01	0.07	94.80%
10/24/13	390,852	\$85.07	-0.78%	0.56%	-1.42%	0.00	1.34	1.28	-1.20%	0.42%	0.01	0.28	77.91%
10/25/13	416,048	\$83.95	-1.32%	0.37%	-0.33%	0.00	1.34	1.27	-0.06%	-1.26%	0.01	-0.85	39.88%
10/28/13	1,072,021	\$82.50	-1.73%	-0.08%	0.30%	0.00	1.34	1.28	0.14%	-1.86%	0.01	-1.26	21.19%
10/29/13	3,055,227	\$80.51	-2.41%	0.32%	-0.04%	0.00	1.34	1.27	0.21%	-2.62%	0.01	-1.76	8.15%
10/30/13	1,256,498	\$78.10	-2.99%	-0.54%	-0.14%	0.00	1.34	1.23	-1.05%	-1.94%	0.01	-1.31	19.31%
10/31/13	838,072	\$78.08	-0.03%	-0.27%	-0.13%	0.00	1.36	1.23	-0.70%	0.67%	0.01	0.45	65.50%
11/1/13	932,936	\$77.96	-0.15%	0.06%	-0.49%	0.00	1.36	1.21	-0.66%	0.50%	0.01	0.34	73.62%
11/4/13	643,628	\$77.74	-0.28%	0.37%	0.33%	0.00	1.36	1.21	0.76%	-1.05%	0.01	-0.70	48.38%
11/5/13	627,908	\$76.58	-1.49%	0.11%	-0.72%	0.00	1.36	1.20	-0.85%	-0.64%	0.01	-0.43	66.79%
11/6/13	646,576	\$76.90	0.42%	-0.15%	0.96%	0.00	1.37	1.19	0.80%	-0.38%	0.01	-0.26	79.83%
11/7/13	745,630	\$75.53	-1.78%	-1.89%	0.80%	0.00	1.37	1.18	-1.81%	0.03%	0.01	0.02	98.59%
11/8/13	476,744	\$75.76	0.30%	1.61%	-0.73%	0.00	1.37	1.18	1.19%	-0.89%	0.01	-0.60	55.25%
11/11/13	410,508	\$75.01	-0.99%	0.01%	0.32%	0.00	1.35	1.20	0.27%	-1.26%	0.01	-0.85	39.85%
11/12/13	342,656	\$75.09	0.11%	0.02%	0.01%	0.00	1.28	1.02	-0.06%	0.17%	0.01	0.12	90.34%
11/13/13	382,899	\$76.51	1.89%	1.17%	-0.21%	0.00	1.30	0.93	1.20%	0.69%	0.01	0.52	60.60%
11/14/13	514,301	\$76.75	0.31% 1.22%	0.20%	-0.16%	0.00	1.31	0.92	0.00%	0.32%	0.01	0.24 0.73	81.07%
11/15/13 11/18/13	527,827 582,338	\$77.69 \$77.00	-0.89%	0.33%	-0.06% 0.74%	$0.00 \\ 0.00$	1.30 1.29	0.90 0.90	0.26% -0.64%	0.97% -0.25%	0.01 0.01	-0.19	46.57% 84.92%
	455,718	\$77.00	-0.89%	-0.40%	-0.57%	0.00	1.29	0.90	-0.04%	-0.25% -1.45%	0.01	-0.19 -1.10	27.42%
11/19/13 11/20/13	382,282	\$75.02	0.23%	-0.40%	0.47%	0.00	1.29	0.88	-0.02%	0.25%	0.01	0.19	85.27%
11/20/13	229,577	\$76.58	1.85%	1.22%	0.47%	0.00	1.28	0.91	1.69%	0.25%	0.01	0.19	90.74%
11/21/13	290,244	\$77.00	0.55%	0.57%	0.21%	0.00	1.30	0.92	0.80%	-0.25%	0.01	-0.19	85.01%
11/25/13	611,725	\$76.46	-0.70%	0.08%	-0.33%	0.00	1.29	0.93	-0.35%	-0.35%	0.01	-0.17	78.70%
11/26/13	392,980	\$75.65	-1.06%	0.58%	-0.21%	0.00	1.30	0.95	0.43%	-1.49%	0.01	-1.14	25.68%
11/27/13	505,190	\$74.90	-0.99%	0.69%	-0.26%	0.00	1.28	0.97	0.48%	-1.47%	0.01	-1.13	26.29%
11/29/13	196,528	\$74.85	-0.07%	0.37%	-0.60%	0.00	1.26	1.02	-0.32%	0.25%	0.01	0.19	84.85%
12/2/13	367,643	\$73.67	-1.58%	-0.36%	-0.19%	0.00	1.28	1.03	-0.84%	-0.73%	0.01	-0.57	57.29%
12/3/13	480,314	\$72.58	-1.48%	-0.20%	0.21%	0.00	1.31	1.02	-0.26%	-1.22%	0.01	-0.95	34.57%
12/4/13	737,740	\$70.69	-2.60%	0.03%	0.66%	0.00	1.30	1.01	0.48%	-3.08%	0.01	-2.39	1.86% *
12/5/13	884,154	\$73.64	4.17%	-0.12%	0.14%	0.00	1.34	0.93	-0.31%	4.48%	0.01	3.45	0.08% **
12/6/13	491,957	\$73.29	-0.48%	0.73%	0.25%	0.00	1.31	0.94	0.95%	-1.42%	0.01	-1.04	29.87%
12/9/13	567,070	\$72.74	-0.75%	0.15%	-0.12%	0.00	1.27	0.97	-0.19%	-0.56%	0.01	-0.41	68.16%
12/10/13	650,676	\$71.33	-1.94%	-0.20%	0.01%	0.00	1.26	0.97	-0.51%	-1.43%	0.01	-1.06	29.31%
12/11/13	522,945	\$69.58	-2.45%	-1.39%	-0.30%	0.00	1.34	0.96	-2.45%	-0.01%	0.01	-0.01	99.53%
12/12/13	977,748	\$67.23	-3.38%	-0.13%	-0.04%	0.00	1.35	1.00	-0.55%	-2.83%	0.01	-2.13	3.52% *
12/13/13	660,476	\$67.17	-0.09%	0.07%	1.17%	0.00	1.39	1.00	0.89%	-0.98%	0.01	-0.73	46.74%
12/16/13	795,869	\$68.23	1.58%	0.71%	0.48%	0.00	1.39	0.97	1.08%	0.50%	0.01	0.37	71.08%
12/17/13	2,020,755	\$73.74	8.08%	-0.14%	-0.11%	0.00	1.37	0.98	-0.69%	8.77%	0.01	6.53	0.00% **
12/18/13	958,963	\$73.84	0.14%	1.15%	0.13%	0.00	1.34	1.00	1.38%	-1.25%	0.02	-0.80	42.71%
12/19/13	469,212	\$72.94	-1.22%	-0.29%	-0.20%	0.00	1.32	0.96	-0.84%	-0.37%	0.02	-0.25	80.54%
12/20/13	1,477,751	\$75.96	4.13%	1.15%	-0.10%	0.00	1.33	0.97	1.16%	2.97%	0.02	1.96	5.26%
12/23/13	570,021	\$74.60	-1.78%	1.08%	-0.36%	0.00	1.38	0.96	0.89%	-2.67%	0.02	-1.73	8.55%
12/24/13	244,691	\$74.74	0.19%	0.16%	0.21%	0.00	1.34	0.98	0.14%	0.05%	0.02	0.03	97.69%
12/26/13	295,174	\$74.41	-0.44%	0.28%	-0.44%	0.00	1.33	0.96	-0.33%	-0.11%	0.02	-0.07	94.23%
12/27/13	327,195	\$74.67	0.35%	-0.24%	0.52%	0.00	1.33	0.98	-0.07%	0.42%	0.02	0.27	78.47%
12/30/13	364,834	\$74.48	-0.25%	-0.05%	0.46%	0.00	1.31	0.98	0.11%	-0.36%	0.02	-0.24	81.35%
12/31/13	378,248	\$74.86	0.51%	0.54%	0.08%	0.00	1.31	0.97	0.49%	0.02%	0.02	0.01	98.98%
1/2/14	732,541	\$74.10	-1.02%	-0.79%	-0.16%	0.00	1.33	0.96	-1.49%	0.47%	0.02	0.31	75.80%
1/3/14	358,335	\$74.67	0.77%	-0.27%	0.72%	0.00	1.33	0.96	0.06%	0.71%	0.02	0.46	64.33%
1/6/14	585,028	\$73.74	-1.25%	-0.44%	0.02%	0.00	1.33	0.98	-0.82%	-0.42%	0.02	-0.28	78.26%
1/7/14	585,544	\$74.29	0.75%	0.96%	0.18%	0.00	1.32	0.98	1.20%	-0.45%	0.02	-0.30	76.47%

Appendix G CommVault Common Stock Data

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
				Markat	Excess Industry		Coefficien		Prodicted	Abnormal	Root		
Date	Volume	Price	Return	Return		Intercep	t Market			Return	MSE	t-statistic	p-Value
1/8/14	589,727	\$73.91	-0.51%	0.30%	0.15%	0.00	1.31	0.98	0.28%	-0.80%	0.02	-0.53	60.05%
1/9/14	690,539	\$71.70	-2.99%	-0.22%	-0.19%	0.00	1.31	0.98	-0.74%	-2.25%	0.02	-1.49	14.00%
1/10/14	594,995	\$71.95	0.35%	0.44%	0.00%	0.00	1.34	0.96	0.30%	0.05%	0.02	0.03	97.59%
1/13/14	1,104,005	\$68.96	-4.16%	-1.47%	0.23%	0.00	1.35	0.95	-2.04%	-2.11%	0.02	-1.40	16.55%
1/14/14	766,981	\$68.74	-0.32%	1.69%	-0.55%	0.00	1.40	0.93	1.56%	-1.88%	0.02	-1.23	22.08%
1/15/14	1,100,199	\$71.00	3.29%	0.76%	0.30%	0.00	1.36	0.97	0.99%	2.30%	0.02	1.52	13.02%
1/16/14	1,592,755	\$75.17	5.87%	0.09%	-0.01%	0.00	1.38	0.99	-0.21%	6.08%	0.02	4.00	0.01% **
1/17/14	584,608	\$74.97	-0.27%	-0.50%	-0.04%	0.00	1.38	0.95	-1.00%	0.73%	0.02	0.45	65.18%
1/21/14	659,573	\$75.73	1.01%	0.67%	-0.48%	0.00	1.37	0.95	0.20%	0.82%	0.02	0.50	61.59%
1/22/14	384,576	\$75.00	-0.96%	0.41%	-0.33%	0.00	1.37	0.94	0.00%	-0.96%	0.02	-0.60	55.29%
1/23/14	678,380	\$75.97	1.29%	-0.57%	0.18%	0.00	1.37	1.01	-0.84%	2.13%	0.02	1.33	18.78%
1/24/14	929,600	\$73.93	-2.69%	-2.15%	-0.23%	0.00	1.35	1.05	-3.38%	0.69%	0.02	0.43	67.09%
1/27/14	715,600	\$72.43	-2.03%	-1.08%	-0.39%	0.00	1.33	1.07	-2.07%	0.04%	0.02	0.02	98.23%
1/28/14	1,382,039	\$76.10	5.07%	0.35%	0.43%	0.00	1.33	1.07	0.71%	4.35%	0.02	2.68	0.83% **
1/29/14	5,441,791	\$69.44	-8.75%	-1.13%	-0.13%	0.00	1.38	1.27	-1.93%	-6.82%	0.02	-4.14	0.01% **
1/30/14	1,743,970	\$71.24	2.59%	1.77%	0.89%	0.00	1.38	1.27	3.37%	-0.77%	0.02	-0.47	64.03%
1/31/14 2/3/14	826,648 1,763,042	\$69.07 \$64.76	-3.05% -6.24%	-0.46% -2.61%	-0.77% -1.04%	0.00	1.37 1.38	1.27 1.32	-1.81% -5.17%	-1.23% -1.07%	0.02 0.02	-0.75 -0.65	45.53% 51.88%
	1,763,042	\$64.16		0.87%		0.00							
2/4/14 2/5/14	1,767,293	\$64.24	-0.93% 0.12%	-0.47%	-0.06% 0.50%	0.00	1.41	1.36 1.37	0.93% -0.20%	-1.85%	0.02 0.02	-1.12 0.20	26.44% 84.52%
2/6/14	748,976	\$65.39	1.79%	1.19%	-0.74%	0.00 0.00	1.40 1.40	1.37	0.42%	0.32% 1.37%	0.02	0.20	41.05%
2/7/14	992,509	\$66.52	1.73%	1.19%	-0.74%	0.00	1.40	1.38	2.02%	-0.30%	0.02	-0.18	85.88%
2/10/14	1,195,413	\$67.85	2.00%	0.54%	-0.1176	0.00	1.40	1.32	0.04%	1.96%	0.02	1.18	24.13%
2/10/14	805,829	\$67.84	-0.01%	1.04%	0.49%	0.00	1.39	1.33	1.92%	-1.93%	0.02	-1.16	24.1376
2/11/14	796,018	\$68.40	0.83%	0.25%	0.43%	0.00	1.39	1.27	0.18%	0.65%	0.02	0.39	70.03%
2/12/14	911,217	\$69.38	1.43%	0.23%	0.58%	0.00	1.40	1.31	1.85%	-0.41%	0.02	-0.25	80.45%
2/13/14	717,109	\$69.04	-0.49%	0.08%	-0.28%	0.00	1.36	1.31	-0.49%	0.00%	0.02	0.00	99.92%
2/18/14	792,714	\$69.02	-0.03%	0.72%	0.37%	0.00	1.37	1.29	1.23%	-1.26%	0.02	-0.76	44.75%
2/19/14	711,786	\$68.88	-0.20%	-0.81%	0.46%	0.00	1.36	1.27	-0.78%	0.58%	0.02	0.35	72.74%
2/20/14	692,831	\$68.97	0.13%	0.70%	0.03%	0.00	1.36	1.28	0.74%	-0.61%	0.02	-0.37	71.18%
2/21/14	851,439	\$68.92	-0.07%	-0.10%	-0.04%	0.00	1.35	1.30	-0.45%	0.38%	0.02	0.23	81.81%
2/24/14	852,884	\$68.72	-0.29%	0.70%	-0.23%	0.00	1.35	1.30	0.37%	-0.66%	0.02	-0.40	68.65%
2/25/14	520,665	\$68.81	0.13%	-0.12%	0.05%	0.00	1.34	1.31	-0.38%	0.51%	0.02	0.31	75.68%
2/26/14	468,636	\$68.96	0.22%	0.11%	0.56%	0.00	1.34	1.29	0.61%	-0.39%	0.02	-0.24	81.08%
2/27/14	505,725	\$69.52	0.81%	0.63%	0.13%	0.00	1.34	1.28	0.75%	0.07%	0.02	0.04	96.79%
2/28/14	501,458	\$68.88	-0.92%	-0.25%	-0.09%	0.00	1.34	1.27	-0.72%	-0.20%	0.02	-0.12	90.45%
3/3/14	600,332	\$68.36	-0.75%	-0.70%	-0.48%	0.00	1.34	1.27	-1.82%	1.07%	0.02	0.65	51.51%
3/4/14	580,103	\$71.37	4.40%	1.75%	0.40%	0.00	1.34	1.26	2.59%	1.81%	0.02	1.10	27.22%
3/5/14	772,822	\$69.98	-1.95%	0.15%	-0.52%	0.00	1.38	1.32	-0.72%	-1.23%	0.02	-0.74	45.82%
3/6/14	543,088	\$69.23	-1.07%	-0.13%	0.18%	0.00	1.38	1.36	-0.18%	-0.89%	0.02	-0.54	58.88%
3/7/14	783,766	\$67.49	-2.51%	-0.37%	-0.25%	0.00	1.37	1.37	-1.08%	-1.43%	0.02	-0.87	38.58%
3/10/14	1,137,329	\$65.31	-3.23%	-0.04%	-0.78%	0.00	1.38	1.39	-1.39%	-1.84%	0.02	-1.12	26.70%
3/11/14	1,543,930	\$63.99	-2.02%	-0.63%	-0.30%	0.00	1.38	1.45	-1.56%	-0.46%	0.02	-0.28	78.28%
3/12/14	728,547	\$63.43	-0.88%	0.39%	-0.14%	0.00	1.38	1.46	0.04%	-0.92%	0.02	-0.55	58.04%
3/13/14	1,174,850	\$61.92	-2.38%	-1.45%	-0.71%	0.00	1.36	1.48	-3.32%	0.94%	0.02	0.57	57.02%
3/14/14	592,028	\$62.85	1.50%	-0.35%	0.06%	0.00	1.34	1.46	-0.68%	2.18%	0.02	1.32	19.08%
3/17/14	787,483	\$63.28	0.68%	0.82%	-0.27%	0.00	1.33	1.47	0.43%	0.26%	0.02	0.15	87.76%
3/18/14	963,449	\$66.20	4.61%	1.25%	0.85%	0.00	1.33	1.48	2.65%	1.97%	0.02	1.18	24.00%
3/19/14	1,450,252	\$69.01	4.24%	-0.59%	-0.58%	0.00	1.35	1.54	-1.94%	6.18%	0.02	3.72	0.03% **
3/20/14	1,007,073	\$69.36	0.51%	0.27%	-0.27%	0.00	1.32	1.37	-0.21%	0.72%	0.02	0.41	68.17%
3/21/14	1,368,332	\$69.84	0.69%	-0.98%	-0.04%	0.00	1.31	1.35	-1.55%	2.24%	0.02	1.28	20.27%
3/24/14	1,246,309	\$69.42	-0.60%	-1.18%	0.21%	0.00	1.28	1.34	-1.40%	0.80%	0.02	0.45	65.07%
3/25/14	860,199	\$68.63	-1.14%	0.19%	-0.48%	0.00	1.27	1.35	-0.59%	-0.55%	0.02	-0.31	75.66%
3/26/14	991,618	\$65.46	-4.63%	-1.43%	-0.53%	0.00	1.26	1.36	-2.72%	-1.91%	0.02	-1.09	27.86%
3/27/14	811,631	\$65.22	-0.36%	-0.52%	0.39%	0.00	1.29	1.40	-0.32%	-0.04%	0.02	-0.02	98.34%
3/28/14	769,180	\$64.48	-1.13%	0.11%	-0.15%	0.00	1.30	1.40	-0.27%	-0.87%	0.02	-0.49	62.39%
3/31/14	545,709	\$64.95	0.73%	1.05%	0.39%	0.00	1.29	1.41	1.70%	-0.97%	0.02	-0.55	58.34%

Appendix G CommVault Common Stock Data

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
					Excess	(Coefficien	t					
				Market	Industry			Excess	Predicted	Abnormal	Root		
Date	Volume	Price	Return	Return	Return	Intercept	Market	Industry	Return	Return	MSE	t-statistic	p-Value
4/1/14	1,172,686	\$68.66	5.71%	1.66%	0.04%	0.00	1.30	1.41	1.98%	3.73%	0.02	2.12	3.62% *
4/2/14	453,585	\$68.07	-0.86%	0.20%	0.02%	0.00	1.37	1.40	0.08%	-0.94%	0.02	-0.53	60.00%
4/3/14	437,132	\$66.83	-1.82%	-0.90%	-0.65%	0.00	1.36	1.41	-2.36%	0.53%	0.02	0.30	76.65%
4/4/14	494,896	\$65.75	-1.62%	-2.59%	0.45%	0.00	1.40	1.41	-3.20%	1.58%	0.02	0.89	37.76%
4/7/14	706,712	\$66.81	1.61%	-1.16%	0.17%	0.00	1.35	1.45	-1.50%	3.11%	0.02	1.74	8.52%
4/8/14	653,651	\$67.48	1.00%	0.82%	-0.62%	0.00	1.30	1.49	-0.02%	1.02%	0.02	0.56	57.44%
4/9/14	902,116	\$70.80	4.92%	1.73%	0.28%	0.00	1.29	1.22	2.46%	2.46%	0.02	1.38	16.97%
4/10/14	925,730	\$66.21	-6.48%	-3.10%	0.33%	0.00	1.32	1.25	-3.79%	-2.69%	0.02	-1.50	13.63%
4/11/14	953,145	\$62.70	-5.30%	-1.34%	-0.81%	0.00	1.40	1.23	-3.02%	-2.28%	0.02	-1.27	20.63%
4/14/14	480,997	\$64.47	2.82%	0.58%	-0.13%	0.00	1.42	1.30	0.48%	2.35%	0.02	1.30	19.66%
4/15/14	624,825	\$65.33	1.33%	0.29%	0.44%	0.00	1.44	1.29	0.83%	0.50%	0.02	0.28	78.32%
4/16/14	851,792	\$64.04	-1.97%	1.29%	0.14%	0.00	1.44	1.31	1.91%	-3.88%	0.02	-2.14	3.47% *
4/17/14	645,212	\$65.08	1.62%	0.23%	0.77%	0.00	1.39	1.30	1.15%	0.48%	0.02	0.26	79.63%
4/21/14	554,947	\$66.55	2.26%	0.64%	-0.49%	0.00	1.39	1.34	0.05%	2.20%	0.02	1.19	23.63%
4/22/14	618,913	\$67.41	1.29%	0.97%	0.03%	0.00	1.41	1.27	1.26%	0.04%	0.02	0.02	98.48%
4/23/14	754,283	\$67.27	-0.21%	-0.83%	0.40%	0.00	1.41	1.30	-0.77%	0.56%	0.02	0.30	76.13%
4/24/14	1,466,927	\$68.58	1.95%	0.52%	-0.17%	0.00	1.40	1.31	0.39%	1.56%	0.02	0.84	39.99%
4/25/14	8,454,518	\$47.56	-30.65%	-1.75%	0.29%	0.00	1.40	1.29	-2.17%	-28.48%	0.02	-15.48	0.00% **

Notes:

- [1] Trading day.
- [2] Reported composite U.S. volume. Source: Bloomberg.
- [3] Reported composite U.S. price. Source: Bloomberg.
- $[4] = \{[3] / [3] \text{ on previous trading day} 1.$
- [5] Daily return for the NASDAQ Composite Total Return Index. Source: Bloomberg.
- [6] Daily industry return is the daily return for the S&P 400 Software Industry Index (after removing CommVault's daily return based on its daily index weight from the industry return). The excess industry returns are used to account for industry-wide effects in the market model, after removing the effect of market returns. The formula for removing the effect of market returns from the industry return is {industry return (intercept + beta * market return)}. The intercept (-0.0004) and beta (0.9755) are estimated by regressing daily industry returns on market returns over the period 11/9/2012 to 4/25/2014. 11/9/2012, 120 days prior to 5/6/2013, is the earliest excess industry return used in the CommVault market model.
- [7] Intercept from a market model regression (see Exhibit XIII) estimated over the prior 120 trading days.
- [8] Coefficient for the market return from a market model regression (see Exhibit XIII) estimated over the prior 120 trading days.
- [9] Coefficient for the excess industry return from a market model regression (see Exhibit XIII) estimated over the prior 120 trading days.
- $[10] = [7] + \{[8] \times [5]\} + \{[9] \times [6]\}.$
- [11] = [4] [10].
- [12] Root MSE of a market model (see Exhibit XIII) estimated over the prior 120 trading days.
- [13] = [11] / [12].
- [14] Two-tailed p-value associated with the t-statistic in [13]. ** denotes p-value is less than or equal to 1% and * denotes p-value is less than or equal to 5%.

Exhibit I Weekly Trading Volume and Turnover of CommVault Common Stock

"Turnover measured by average weekly trading of 2% or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; 1% would justify a substantial presumption." [Cammer v. Bloom, 711 F. Supp. 1264 (D.N.J. 1989) at 1293.]

	Daily Volume	Weekly Volume	Shares Outstanding	Weekly Turnover
Summary Statistics	of Trading Volume a	nd Turnover duri	ng the Class Period	*
Total	154,416,210	163,541,011		
Average	632,853	3,206,686	47,034,453	6.8%
Minimum	104,518	808,964		1.7%
Median	514,875	2,652,129		5.6%
Maximum	5,441,791	11,849,588		25.1%
Summary Statistics	of Trading Volume a	nd Turnover duri	ng the Class Period	**
Total	154,416,210	146,940,506		
Average	632,853	2,998,786	47,042,650	6.4%
Minimum	104,518	808,964		1.7%
Median	514,875	2,602,826		5.5%
Maximum	5,441,791	10,110,048		21.3%

Note:

See Appendix D for daily / weekly statistics.

^{*} Weekly statistics include all days in the first and last weeks of the Class Period.

^{**} Weekly statistics exclude all days in the first and last weeks of the Class Period.

Exhibit II Weekly Analyst Coverage of CommVault

	Bloomberg Total Analyst Recommendations	Number of Analysts in Thomson Reuters I/B/E/S Consensus
Average	17	18
Minimum	15	15
Median	16	17
Maximum	19	20

Notes:

See Appendix E for weekly statistics over the Class Period and the corrective disclosure date of April 25, 2014.

Exhibit III-A Numbers of Analyst Reports Issued for CommVault during the Class Period Class Period: May 7, 2013 - April 24, 2014

Analysts	Count
BMO Capital Markets	4
Brean Capital, LLC	2
CFRA Equity Research	7
Craig-Hallum Capital Group	3
Credit Suisse	6
Eva Dimensions	125
Globaldata	6
Jefferies & Company	5
Jefferson Research & Management	51
JMP Securities	5
Ladenburg Thalmann & Company	1
Lake Street Capital Markets, LLC	6
Lazard Capital Markets	6
Macquarie Research	2
Market Edge	1
Monness Crespi Hardt	1
Needham & Company	4
Oppenheimer & Co. Inc.	4
Piper Jaffray	11
Raymond James & Associates	4
RBC Capital Markets	10
S&P Global Compustat Company Analysis	9
Sadif Analytics	5
Sterne Agee & Leach	7
Stifel Nicolaus	18
Summit Research	11
Thestreet.Com Ratings	51
Validea	1
William Blair & Company	8
Wright Investors Service	6
Zacks Investment Research Inc.	31
Total	411

Notes:

- [1] Multiple reports issued from the same analyst on the same day are counted as a single report.
- [2] Reports from the same analyst from different databases that have the same titles but different dates are treated as being released on the first date listed in the databases.
- [3] I include analyst reports issued on the corrective disclosure date of April 25, 2014 in this analysis.

Sources:

Thomson Reuters Knowledge, Thomson ONE databases, Capital IQ and Counsel.

Exhibit III-B Analyst Participation in CommVault Conference Calls Class Period: May 7, 2013 - April 24, 2014

	[1]	[2]	[3]	[4]	[5]	[6]
		(Confe	rence	e Call	S
Analyst/Investor	Count of Conference Calls	5/7/2013	7/30/2013	10/29/2013	1/29/2014	4/25/2014
BMO Capital Markets*	2				X	X
Craig-Hallum Capital Group	2	X	X			
Credit Suisse	3	X		X		X
Goldman Sachs	4		X	X	X	X
Jefferies & Company	5	X	X	X	X	X
JMP Securities	1					X
Lake Street Capital Markets, LLC	5	X	X	X	X	X
Lazard Capital Markets	3	X	X	X		
Macquarie Research**	2				X	X
Mizuho Securities	3		X	X	X	
Needham & Company	4	X		X	X	X
Pacific Crest Securities	3	X			X	X
Piper Jaffray	5	X	X	X	X	X
Raymond James & Associates	5	X	X	X	X	X
RBC Capital Markets	3	X	X	X		
Sterne, Agee & Leach	1			X		
Stifel Nicolaus	5	X	X	X	X	X
Summit Research	4	Х	X	Х	X	
William Blair & Company	4		X	X	X	X

Notes:

I include in my analysis the conference call held on April 25, 2014, the first day after the end of the Class Period.

- [1] Equals count of "x"s in [2] through [6].
- [2] Q4 2013 CommValut Earnings Conference Call, Thomson Reuters Streetevents Edited Transcript, May 7, 2013.
- [3] Q1 2014 CommValut Earnings Conference Call, Thomson Reuters Streetevents Edited Transcript, July 30, 2013.
- [4] Q2 2014 CommValut Earnings Conference Call, Thomson Reuters Streetevents Edited Transcript, October 29, 2013.
- [5] Q3 2014 CommValut Earnings Conference Call, Thomson Reuters Streetevents Edited Transcript, January 29, 2014.
- [6] Q4 2014 CommValut Earnings Conference Call, Thomson Reuters Streetevents Edited Transcript, April 25, 2014.
- *BMO Capital Markets' analyst (Joel Fishbein) represented Lazard Capital Markets on prior calls.

^{**}Macquarie Research's analyst (Rajesh Ghal) represented Craig-Hallum Capital Group on some of the prior calls.

Exhibit III-C Investor Conferences Hosted by Analysts Class Period: May 7, 2013 - April 24, 2014

	Date	Analyst Firms
[1]	6/12/2013	William Blair & Company
[2]	12/4/2013	Credit Suisse
[3]	2/11/2014	Stifel Nicolaus
[4]	2/12/2014	Goldman Sachs
[5]	3/4/2014	Raymond James & Associates
[6]	3/11/2014	Piper Jaffray

Notes:

Conferences from http://ir.commvault.com/phoenix.zhtml?c=197582&p=irol-calendarPast_pf (accessed April 7, 2014).

- [1] CommVault at William Blair Growth Stock Conference.
- [2] CommVault at Credit Suisse Technology Conference.
- [3] CommVault at Stifel, Nicolaus Technology, Internet & Media Conference.
- [4] CommVault at Goldman Sachs Technology and Internet Conference.
- [5] CommVault at Raymond James Financial Inc Institutional Investors Conference.
- [6] CommVault at Piper Jaffray Technology, Media and Telecommunications Conference.

Exhibit IV-A Broker Trades in CommVault Common Stock

Total reported volume:116,184,608Total broker volume:57,870,245Total broker volume / Total reported volume:49.81%Number of brokers with volume > 1% of Reported Volum10

	Broker Volume and Broker Volume as a Pe	rcent of Total Reported Volume			
Broker Name	June 2013 - March 2014				
[1] Credit Suisse First Boston LLC	8,991,928	7.74%			
[2] Morgan Stanley & Co.	8,061,376	6.94%			
[3] Wedbush	5,865,292	5.05%			
[4] Barclays Capital Inc.	5,769,083	4.97%			
[5] Instinct	3,982,779	3.43%			
[6] Goldman Sachs	3,666,276	3.16%			
[7] Electronic Transaction Clearing, Inc.	3,603,531	3.10%			
[8] UBS Securities LLC.	2,923,443	2.52%			
[9] Deutsche Bank Securities Inc.	2,858,170	2.46%			
[10] J.P. Morgan Securities Inc.	2,801,187	2.41%			
[11] Knight Capital Americas, L.P.	1,121,998	0.97%			
[12] Knight Equity Markets, L.P.	1,086,106	0.93%			
[13] Citigroup Global Markets Inc.	1,065,449	0.92%			
[14] Tradebot Systems, Inc.	747,526	0.64%			
[15] FIMAT USA, Inc.	547,141	0.47%			
[16] Interactive Brokers LLC	543,848	0.47%			
[17] Lime Brokerage LLC	527,219	0.45%			
[18] LEK Securities Corporation	401,680	0.35%			
[19] Fox River Execution Tehnology, LLC	373,307	0.32%			
[20] Sanford C. Bernstein And Co. I	370,535	0.32%			
[21] Wolverine Execution Services	345,091	0.30%			
[22] White Bay PT LLC	292,637	0.25%			
[23] Jefferies & Company, Inc.	203,720	0.18%			
[24] Cutler Group, Lp	202,847	0.17%			

Notes:

[3] Only brokers trading in excess of 0.1% of reported volume are listed. 70 additional brokers trading below the 0.1% threshold are listed in Exhibit IV-B for a total of 94 brokers.

Source:

Bloomberg.

^[1] Data for June 2013 - March 2014 (except for December 2013) are considered. Broker volume for December 2013 is not available from Bloomberg. The partial months of May 2013 and April 2014 as well as December 2013 are excluded from the analysis. The total reported volume of June 2013 to March 2014 also excludes the partial months of May 2013 and April 2014, as well as December 2013 (which are included in Exhibit I).

^[2] Goldman Sachs and Goldman Sachs Execution & Clearing, L.P. have been combined as Goldman Sachs; Instinet Corporation and Instinet, LLC have been combined as Instinet; Morgan Stanley & Co. LLC and Morgan Stanley & Co. Incorpor have been combined as Morgan Stanley & Co.; Wedbush Morgan Securities Inc. and Wedbush Securities Inc. have been combined as Wedbush; and Wolverine Execution Services, and Wolverine Execution Services, LLC have been combined as Wolverine Execution Services.

Exhibit IV-B Additional Brokers that Reported Trading Activity in CommVault Common Stock

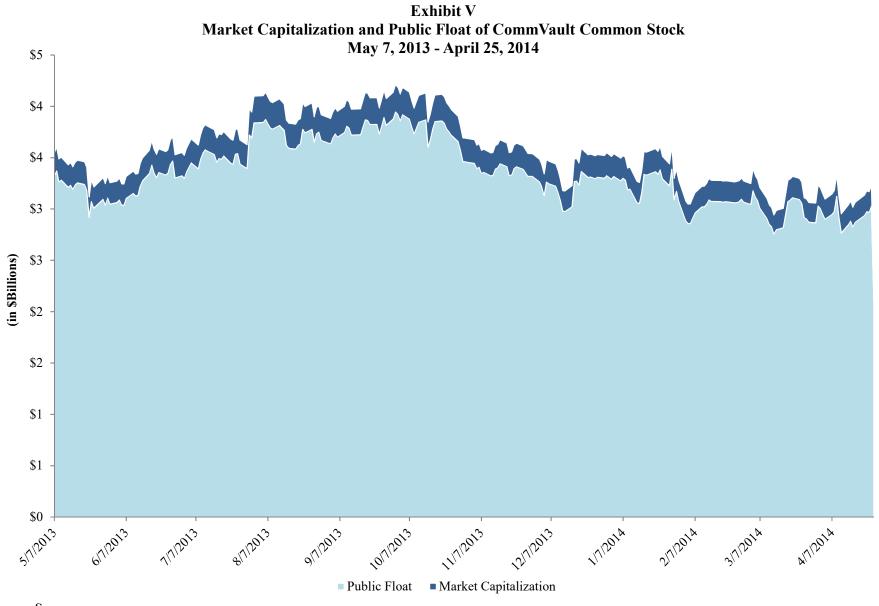
Broker Name	Broker Name	Broker Name
[1] Aegis Capital Corp.	[25] Friedman, Billings, Ramsey & C	[49] Robert W. Baird & Co. Incorpor
[2] Ameritrade, Inc.	[26] Global-American Investments, I	[50] Scottrade, Inc.
[3] Apex Clearing Corporation	[27] Imperial Capital LLC	[51] Scout Trading LLC
[4] Automated Trading Desk Financial Services, LLC	[28] Investors Exchange	[52] SJ Levinson LLC
[5] Baypoint Trading LLC	[29] ITG Inc.	[53] Southwest Securities, Inc.
[6] BMO Capital Markets	[30] JNK Securities Corp.	[54] Spartan Securities Group Ltd
[7] BNP Paribas Securities Corp.	[31] Jones And Associates Inc.	[55] Speedroute LLC
[8] BNY Mellon Capital Markets, LLC	[32] Jump Trading	[56] Stephens Inc.
[9] BRUT, LLC	[33] Lazard Capital Markets	[57] Sterne Agee And Leach Inc.
[10] BTIG, LLC	[34] Leerink Swann & Co., Inc.	[58] Stifel Nicolaus
[11] C. L. King & Associates, Inc.	[35] Lightspeed Trading, LLC	[59] Stock Usa Investments
[12] Canaccord Genuity Inc	[36] MB Trading	[60] Suntrust Capital Markets, Inc.
[13] Cantor Fitzgerald & Co.	[37] MISMI, Inc.	[61] TD Securities (Usa) Inc.
[14] Capital Institutional Services	[38] National Financial Services LL	[62] The Benchmark Company, LLC
[15] Charles Schwab And Co. Inc.	[39] Needham and Co.	[63] The Gaussian Group, LLC
[16] CLSA Americas, LLC	[40] O'Connor & Company LLC	[64] Timber Hill LLC
[17] Cowen	[41] Oppenheimer & Co. Inc.	[65] Tradestation Securities, Inc.
[18] Craig-Hallum Capital Group LLC	[42] Pacific Crest Securities Inc.	[66] Triad Securities Corp
[19] Credit Agricole Indosuez Cheuv	[43] PDQ ATS. Inc.	[67] Viewtrade Securities, Inc.
[20] Daiwa Securities America Inc.	[44] Pershing Trading Company L.P.	[68] Wells Fargo Securities, LLC
[21] Dart Executions, LLC	[45] Piper Jaffray & Co.	[69] WS Clearing Inc.
[22] E*Trade Clearing LLC	[46] Potamus Trading, LLC	[70] Xambala Capital, LLC
[23] Electronic Brokerage Systems	[47] Princeton Securities Group, LLC	
[24] First Clearing, LLC	[48] Raffensperger, Hughes & Co., Inc.	

Notes:

- [1] Data for June 2013 March 2014 (except for December 2013) are considered. Broker volume for December 2013 is not available from Bloomberg. The partial months of May 2013 and April 2014 as well as December 2013 are excluded from the analysis.
- [2] Brokers trading below a 0.1% reported volume threshold are listed; those trading in excess are listed in Exhibit IV-A.
- [3] Cowen & Co., LLC and Cowen Capital LLC have been combined as Cowen; Electronic Brokerage Systems I and Electronic Brokerage Systems, LLC have been combined as Electronic Brokerage Systems; Jump Trading and Jump Trading, LLC have been combined as Jump Trading; Lightspeed Trading LLC and Lightspeed Trading, LLC have been combined as Lightspeed Trading, LLC; and Wells Fargo Securities, LLC and WELLS FARGO SECURITIES, LLC. have been combined as Wells Fargo Securities, LLC. There are other records of brokers that are not in the exhibit because the broker name is missing or the broker name is classified as <unamend>.

Source:

Bloomberg.



Sources: Bloomberg and SEC filings.

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Exhibit VI Bid-Ask Spread in CommVault Common Stock

	CommVault Common Stock Daily Bid-Ask % Spread	NASDAQ Common Stocks 2009 CRSP % Spread		
5/7/2013 - 4/24/2014		Monthly Data	Yearly Data	
Average	0.15%	2.55%	2.91%	
Median	0.13%	0.69%	0.92%	

Notes:

See Appendix F for CommVault daily statistics.

Statistics for 2009 CRSP spread for NASDAQ common stocks are obtained from Kee H. Chung and Hao Zhang, *A Simple Approximation of Intraday Spreads Using Daily Data*, 17 J. Fin. Markets, 94, Table 2 (2014).

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No	Institution	No	Institution
1	1832 Asset Management L.P.	42	British Columbia Investment Management Corporation
2	361° Capital LLC	43	Brown Advisory Incorporated
3	AB Trust & Investment Services Group	44	Cabot Wealth Management, Inc.
4	Aberdeen Asset Managers Limited	45	Calamos Advisors LLC
5	Absolute Return Capital, LLC	46	Calamos Asset Management Inc. (NasdaqGS:CLMS)
6	Advantus Capital Management, Inc.	47	California Public Employees' Retirement System
7	Advisors Asset Management, Inc.	48	Calvert Investment Management, Inc.
8	AGF Management Limited (TSX:AGF.B)	49	Campbell & Company, LP
9	Airain Ltd.	50	Canada Pension Plan Investment Board
10	AllianceBernstein L.P.	51	Capital Fund Management S.A.
11	Allianz Asset Management AG	52	Capital One Asset Management, LLC
12	Alpha Windward LLC	53	Capstone Asset Management Company
13	ALPS Advisers, Inc.	54	Caxton Associates LP
14	ALTA Skladi, druzba za upravljanje, d.d.	55	CBRE Clarion Securities
15	American Century Investment Management Inc.	56	CCM Partners, L.P.
16	Ameritas Investment Partners Inc.	57	CenturyLink Investment Management Company
17	AMG Funds LLC	58	Certium Asset Management LLC
18	AMP Capital Investors Limited	59	Charles Schwab Investment Management, Inc.
19	Amundi Asset Management	60	Chicago Equity Partners LLC
20	AP Fonden 3	61	Churchill Management Corp.
21	AQR Capital Management, LLC	62	CIM Investment Management, Inc.
22	Arizona State Retirement System	63	Citadel LLC
23	Arrowstreet Capital, Limited Partnership	64	Citigroup Inc., Banking and Securities Investments
24	Artisan Partners Limited Partnership	65	CKW Financial Group, LLC, Asset Management Arm
25	Asset Management Group of Bank of Hawaii	66	ClearArc Capital, Inc.
26	Aurora Investment Counsel	67	ClearBridge Investments, LLC
27	Axiom International Investors LLC	68	ClearBridge, LLC
28	Banca Del Sempione, Asset Management Arm	69	Clinton Group, Inc
29	Bank of America Corporation, Asset Management Arm	70	Cloud Capital LLC
30	Barclays Bank PLC, Securities Investments	71	Clough Capital Partners, L.P.
31	Barclays PLC Private Banking & Investment Banking Investment	72	Coe Capital Management, LLC
32	Bennett Lawrence Management, LLC	73	Columbia Management Investment Advisers, LLC
33	Berkshire Capital Holdings Inc.	74	Columbia Wanger Asset Management, LLC
34	Bessemer Investment Management LLC	75	Columbus Circle Investors
35	BlackRock, Inc. (NYSE:BLK)	76	Comerica Bank, Banking Investments
36	BMO Global Asset Management	77	Copper Rock Capital Partners, LLC
37	BNP Paribas Arbitrage Sa, Asset Management Arm	78	Cortina Asset Management, LLC
38	BNY Mellon Asset Management	79	Credit Suisse Asset Management (Switzerland)
39	Boston Trust & Investment Management Company	80	Credit Suisse, Investment Banking and Securities Investments
40	Bridgeway Capital Management , Inc.	81	Credo Capital Management, LLC
41	Bright Rock Capital Management LLC	82	Cupps Capital Management, LLC

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No	Institution	No	Institution
83	D. E. Shaw & Co., L.P.	124	Gagnon Securities LLC
84	D.F. Dent and Company, Inc.	125	GCIC Ltd
85	Dahl & Partner Vermögensverwaltung AG	126	Gemmer Asset Management LLC
86	Davidson Investment Advisors, Inc.	127	Genesis Capital LLC
87	DBX Strategic Advisors LLC	128	Geneva Capital Management, LLC
88	Delaware Management Business Trust	129	Geode Capital Management, LLC
89	Delta Lloyd Asset Management NV	130	George Weiss Associates Inc.
90	Deutsche Asset & Wealth Management	131	Gilder Gagnon Howe & Co. LLC
91	Deutsche Bank, Private Banking and Investment Banking Investments	132	Globeflex Capital, L.P.
92	DIAM Co., Ltd.	133	Golden Capital Management, LLC
93	Dimensional Fund Advisors LP	134	Goldman Sachs Asset Management, L.P.
94	Dorsey & Whitney Trust Company Llc, Asset Management Arm	135	Goldman Sachs Group, Investment Banking and Securities Investments
95	Driehaus Capital Management LLC	136	Gotham Asset Management, LLC
96	DuPont Capital Management Corp.	137	Great-West Capital Management, LLC
97	Eagle Asset Management, Inc.	138	GSA Capital Partners LLP
98	EAM Investors, LLC	139	Guggenheim Partners, LLC
99	Eaton Vance Management	140	GuideStone Capital Management
100	Ellington Management Group, L.L.C.	141	GWL Investment Management Ltd.
101	Emerald Advisers, Inc.	142	Harvest Capital Strategies LLC
102	Employees Retirement System of Texas	143	Hatteras Alternative Mutual Funds, LLC
103	Envestnet Asset Management, Inc.	144	Hatteras Investment Partners, LLC
104	Equinox Institutional Asset Management, LP	145	HBK Investments L.P.
105	Essex Investment Management Company, LLC	146	Henderson Global Investors Limited
106	EULAV Asset Management, LLC	147	Highbridge Capital Management, LLC
107	Federated Investors, Inc. (NYSE:FII)	148	Highland Capital Management, L.P.
108	FIAM LLC	149	Highmark Capital Management, Inc.
109	Fidelity Investments	150	Hillsdale Investment Management Inc.
110	Fiduciary Trust Company International	151	Howe and Rusling, Inc.
111	FIL Limited	152	Hutchin Hill Capital, LP
112	Finemark Holdings Inc., Asset Management Arm	153	ID-Sparinvest, Filial af Sparinvest S.A., Luxembourg
113	First Mercantile Trust Company, Asset Management Arm	154	Insight Capital Research & Management, Inc.
114	First Trust Advisors L.P.	155	Invesco Advisers, Inc.
115	Florida State Board of Administration	156	Invesco Ltd. (NYSE:IVZ)
116	Fort Washington Investment Advisors, Inc.	157	Invesco PowerShares Capital Management LLC
117	Fortaleza Asset Management, Inc.	158	Invictus RG Pte. Ltd.
118	Frank Russell Company	159	Irish Life Investment Managers Limited
119	Franklin Resources, Inc. (NYSE:BEN)	160	J.P. Morgan Asset Management, Inc.
120	Franklin Street Investment Advisors	161	J.P. Morgan Whitefriars Inc.
121	Fred Alger Management, Inc.	162	Jacobs Levy Equity Management Inc.
122	Fuller & Thaler Asset Management Inc.	163	Jane Street Capital, LLC
123	Gagnon Advisors, LLC	164	Jane Street Group, LLC, Asset Management Arm

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No	Institution	No	Institution
165	Jefferies Group LLC, Asset Management Arm	206	Montibus Capital Management LLC
166	Jennison Associates LLC	207	Morgan Stanley Investment Management Inc.
167	Jensen Investment Management Inc.	208	Morgan Stanley, Investment Banking and Brokerage Investments
168	Jetstream Capital LLC	209	Municipal Employees' Retirement System of Michigan
169	John Deere Pension Trust	210	Mutual of America Capital Management LLC
170	JPMorgan Chase & Co, Brokerage and Securities Investments	211	Nationwide Fund Advisors
171	JPMorgan Chase & Co, Private Banking and Investment Banking Investments	212	Nelson Capital Management, LLC
172	KCG Holdings Inc, Asset Management Arm	213	Neuberger Berman LLC
173	Knight Capital Group Inc., Asset Management Arm	214	New Jersey Division of Investment
174	Lebenthal Lisanti Capital Growth, LLC	215	New York Life Investment Management LLC
175	Ledyard Financial Advisors	216	New York State Common Retirement Fund
176	Liberty Mutual Insurance Company, Asset Management Arm	217	New York State Teachers' Retirement System
177	Lincoln Investment Advisors Corporation	218	Nexpoint Advisors, L.P.
178	LMCG Investments, LLC	219	NGAM Advisors, L.P.
179	Loomis, Sayles & Company L.P.	220	Nicholas Investment Partners, L.P.
180	Lord, Abbett & Co. LLC	221	NISA Investment Advisors, L.L.C.
181	Los Angeles Capital	222	Nomura Holdings Inc, Securities & Investment Arm
182	Louisiana State Employees' Retirement System	223	Norges Bank Investment Management
183	LPL Financial Corporation, Asset Management Arm	224	Northern Trust Global Investments
184	M&T Bank Corp, Asset Management Arm	225	Nuveen Investments, Inc.
185	Mackenzie Financial Corporation	226	OakBrook Investments LLC
186	Managed Account Advisors LLC	227	Oberweis Asset Management, Inc.
187	Manchester Capital Management, LLC	228	Ohio National Investments, Inc.
188	Manulife Asset Management	229	Ohio Public Employees Retirement System
189	Maple Securities USA Inc., Asset Management Arm	230	Old Mutual Global Index Trackers (Pty) Limited
190	Marshall Wace North America LP	231	Old Mutual Global Investors
191	Martingale Asset Management, L.P.	232	OppenheimerFunds, Inc.
192	Mason Street Advisors, LLC	233	Oregon Public Employees Retirement System
193	Massachusetts Financial Services Company	234	O'Shaughnessy Asset Management, LLC
194	Massachusetts Mutual Life Insurance Co., Insurance Investments	235	OTP Fund Management Ltd
195	Mazama Capital Management, Inc.	236	Pacific Life Fund Advisors LLC
196	Menta Capital LLC	237	Palisade Capital Management LLC
197	Merrill Lynch & Co. Inc., Banking Investments	238	PanAgora Asset Management, Inc.
198	Metlife Advisers, LLC	239	Parallax Fund, L.P.
199	Metlife Investment Management, LLC	240	Parametric Portfolio Associates LLC
200	Michigan Department of Treasury, Bureau of Investments	241	PDT Partners, LLC
201	Millennium Management LLC	242	PEAK6 Investments, L.P.
202	Missouri Valley Partners	243	Penn Mutual Asset Management, Inc.
203	Mitsubishi UFJ Kokusai Asset Management Co., Ltd.	244	Pennsylvania Public School Employees Retirement System
204	Mizuho Asset Management Co., Ltd.	245	Perimeter Capital Partners LLC
205	Monarch Partners Asset Management, LLC	246	PGIM, Inc.

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No	Institution	No	Institution
247	Pictet Asset Management Limited	288	Seven Eight Capital, LLC
248	Pioneer Global Asset Management S.p.A.	289	Silvant Capital Management LLC
249	Placemark Investments, Inc.	290	Silvercrest Asset Management Group LLC
250	Plante & Moran Financial Advisors	291	Sit Investment Associates, Inc.
251	PNC Capital Advisors, LLC	292	Societe Generale, Securities Investments
252	PNC Financial Services Group Inc., Banking Investments	293	Soroban Capital Partners LLC
253	Point72 Asset Management, L.P.	294	Spiderrock Trading Llc
254	Principal Global Investors, LLC	295	Spot Trading L.L.C., Asset Management Arm
255	Private Trust Co NA, Asset Management Arm	296	Stanley-Laman Group, Ltd.
256	ProFund Advisors LLC	297	State of New Jersey Common Pension Fund
257	ProShare Advisors LLC	298	State Street Global Advisors, Inc.
258	Prudential Trust Company, Trust Investments	299	State Teachers Retirement System of Ohio
259	Public Employees Retirement Association of Colorado	300	Sterling Capital Management LLC
260	Putnam LLC	301	Stevens Capital Management LP
261	QS Batterymarch Financial Management, Inc	302	Stifel Asset Management Corp.
262	QS Investors LLC	303	Stone Ridge Asset Management LLC
263	Quantbot Technologies, LP	304	Strategic Advisers, Inc
264	Quantitative Investment Management, LLC	305	SunAmerica Asset Management, LLC
265	Rainier Investment Management, LLC	306	SunTrust Banks Inc, Asset Management Arm
266	Raymond James Financial Inc., Asset Management Arm	307	Susquehanna International Group, LLP, Asset Management Arm
267	RBC Dominion Securities Inc., Asset Management Arm	308	Swiss National Bank, Asset Management Arm
268	RBC Global Asset Management Inc.	309	Symphony Asset Management LLC
269	Redwood Investments, LLC	310	T. Rowe Price Group, Inc. (NasdaqGS:TROW)
270	Renaissance Technologies Corp.	311	TAMRO Capital Partners, LLC
271	Retirement Systems Of Alabama	312	TD Asset Management, Inc.
272	Rhumbline Advisers Ltd Partnership	313	Teacher Retirement System of Texas
273	Riverbridge Partners, LLC	314	Teachers Insurance and Annuity Association of America - College Retirement Equities Fund
274	Robeco Institutional Asset Management B.V.	315	Teachers' Retirement System of the State of Kentucky
275	Rothschild Asset Management Inc.	316	Tennessee Department of Treasury, Investment Division
276	Royal Alliance Associates, Inc., Securities Investments	317	Texas Education Agency, Endowment Arm
277	Royal Bank of Canada Trust Company (Bahamas) Limited, Asset Management Arm	318	The Blackstone Group L.P. (NYSE:BX)
278	Royal Bank of Canada, Banking & Securities Investments	319	The Boston Company Asset Management, LLC
279	RS Investment Management Co. LLC	320	The California State Teachers Employees' Retirement System
280	S Squared Technology, LLC	321	The Dai-Ichi Life Insurance Company, Limited, Asset Management Arm
281	SagePoint Financial Advisors, Inc., Securities Investments	322	The Glenmede Trust Company, N.A.
282	Sandy Spring Bank, Asset Management Arm	323	The Huntington Trust Company, National Association
283	Santa Fe Partners LLC	324	The Oxford Asset Management Company Limited
284	Santander Private Banking Gestion, S.A., S.G.I.I.C.	325	The Royal Bank Of Scotland plc, Asset Management Arm
285	Securities America Advisors, Inc.	326	The Vanguard Group, Inc.
286	Security Investors, LLC	327	Thomson Horstmann & Bryant, Inc.
287	SEI Investments Co. (NasdaqGS:SEIC)	328	Thornburg Investment Management, Inc.

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Exhibit VII
Institutions that Held CommVault Common Stock at Some Point During the Class Period

No	Institution	No	Institution
329	Thrivent Investment Management, Inc.	350	Wall Street Associates LLC
330	TimesSquare Capital Management, LLC	351	Walleye Trading LLC, Asset Management Arm
331	Timpani Capital Management LLC	352	WealthTrust-Arizona, LLC
332	Tirschwell & Loewy, Inc.	353	Weaver C. Barksdale & Associates, Inc.
333	Tocqueville Asset Management LP	354	Wellington Management Group LLP
334	Tower Research Capital LLC	355	Wellington Shields Capital Management, LLC
335	Tradeworx, Asset Management Arm	356	Wells Capital Management Incorporated
336	Transamerica Asset Management, Inc.	357	Wells Fargo & Company, Private Banking and Investment Banking Arm
337	Tudor Investment Corporation	358	Wells Fargo & Company, Securities and Brokerage Investments
338	Turner Investments, LP	359	Westfield Capital Management Company, L.P.
339	TWIN Capital Management, Inc.	360	Wexford Capital LLC
340	Two Sigma Advisers, LP	361	Whale Rock Capital Management, LLC
341	Two Sigma Investments, LP	362	Whittier Trust Company
342	U.S. Bancorp Asset Management, Inc.	363	William Blair Investment Management, LLC
343	UBS Asset Management	364	Wilmington Funds Management Corporation
344	Van Eck Associates Corporation	365	Wilshire Associates Incorporated
345	Vantagepoint Investment Advisers, LLC	366	Winslow, Evans & Crocker, Inc., Asset Management Arm
346	Verition Fund Management LLC	367	Winton Capital Management Limited
347	Virginia Retirement System	368	Wolverine Asset Management, LLC
348	Voya Investment Management LLC	369	World Asset Management
349	VTL Associates, LLC	370	Zacks Investment Management, Inc.

Note:

Institutions with positive holdings of Commvault common stock at some point during the Class Period (5/7/2013 - 4/24/2014) include institutions with positive quarterly holdings reported in the Class Period (i.e., 6/30/2013 - 3/31/2014).

Source:

S&P Capital IQ.

Exhibit VIIIInstitutions with Large Positions as of 6/30/2013, 9/30/2013, 12/31/2013, or 3/31/2014

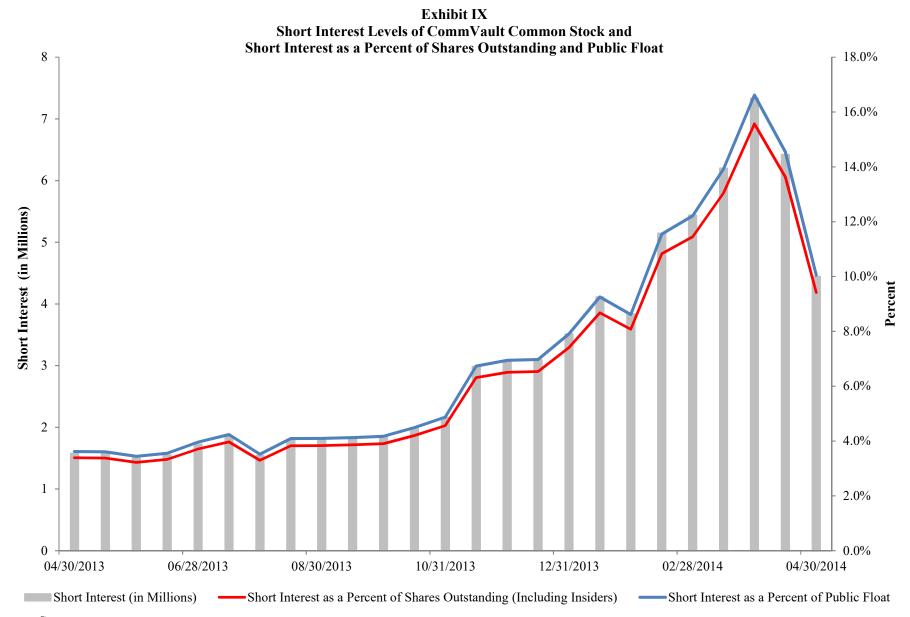
No.	Institution	6/30/2013	9/30/2013	12/31/2013	3/31/2014
1	1832 Asset Management L.P.	649,700	649,700	0	0
2	American Century Investment Management Inc.	1,611,467	1,864,258	1,114,554	96,837
3	Artisan Partners Limited Partnership	2,011,674	2,193,720	4,101,195	4,119,861
4	BlackRock, Inc. (NYSE:BLK)	3,601,199	3,823,270	3,858,283	4,098,490
5	BNY Mellon Asset Management	660,319	715,385	914,363	930,897
6	Columbia Management Investment Advisers, LLC	663,546	684,400	809,225	1,058,703
7	Columbia Wanger Asset Management, LLC	0	0	0	684,500
8	Columbus Circle Investors	1,214,901	1,579,074	690,276	0
9	Cortina Asset Management, LLC	681,560	615,087	431,291	470,662
10	Federated Investors, Inc. (NYSE:FII)	579,155	618,540	587,942	625,429
11	Fidelity Investments	3,240,502	3,084,963	3,117,663	5,836,943
12	GCIC Ltd	802,600	688,659	0	0
13	Invesco Ltd. (NYSE:IVZ)	772,585	778,279	840,666	684,147
14	J.P. Morgan Asset Management, Inc.	285,534	349,132	608,010	2,106,977
15	Massachusetts Financial Services Company	1,118,728	1,026,066	1,237,973	1,129,032
16	Northern Trust Global Investments	857,140	867,759	959,964	924,306
17	OppenheimerFunds, Inc.	859,870	858,280	787,880	508,000
18	Renaissance Technologies Corp.	851,900	906,400	846,400	254,000
19	Soroban Capital Partners LLC	0	0	0	1,028,545
20	State Street Global Advisors, Inc.	1,587,432	1,596,934	1,564,520	1,578,620
21	T. Rowe Price Group, Inc. (NasdaqGS:TROW)	1,801,100	1,585,050	1,841,110	2,220,875
22	TAMRO Capital Partners, LLC	656,408	564,003	610,656	428,843
23	Teachers Insurance and Annuity Association of America - College Retirement Equities Fund	682,678	688,354	690,770	825,540
24	The Vanguard Group, Inc.	2,795,629	2,920,638	3,047,332	2,967,021
25	TimesSquare Capital Management, LLC	932,320	832,320	1,186,010	2,383,200
26	Voya Investment Management LLC	256,663	357,138	707,951	796,160
27	Wells Capital Management Incorporated	1,959,720	1,985,545	2,225,980	1,042,161
28	William Blair Investment Management, LLC	40,817	54,501	8,837	1,055,601
	Positions of the 28 Institutions on Each Date	31,175,147	31,887,455	32,788,851	37,855,350
	Shares Outstanding	46,635,000	47,075,000	47,390,000	47,094,000
	28 Institutional Positions as a % of Shares Outstanding	67%	68%	69%	80%
	Public Float	43,508,629	44,103,030	44,418,030	44,122,030
	28 Institutional Positions as a % of Public Float	72%	72%	74%	86%
	Number of Institutions with Positive Positions on Each Date	282	283	272	263

Notes:

To be included in this list, the institution positions ranked in the top 20 of all institutional positions as of one of the four dates: 6/30/2013, 9/30/2013, 12/31/2013 or 3/31/2014. Institutions with positive holdings of Commvault common stock at some point during the Class Period (5/7/2013 - 4/24/2014) include institutions with positive quarterly holdings reported in the Class Period (i.e., 6/30/2013 - 3/31/2014).

Source:

S&P Capital IQ.



Sources:

Bloomberg and SEC filings.

Exhibit X Summary of Put-Call Parity Test

Number of Valid Observations of Option Pairs	19,369
Number of Violations of Put-Call Parity	1
Violation as a % of Total Observations	0.01%

Constraints:

$$S_{ask} > C_{bid} - P_{ask} + Xe^{-rt}$$

 $S_{bid} < C_{ask} - P_{bid} + X$

Notes:

[1] The ask price for the call option, the bid price for the put option and the bid price for the stock was used for the lower bound; and the bid price for the call option, the ask price for the put option and the ask price for the stock was used for the upper bound in the inequality above.
[2] CommVault did not declare any dividends on its common stock during the Class Period. As such, this analysis uses the inequality for American options that do not pay dividends.

Definition of Variables:

- S Stock price of CommVault common stock.
- X Exercise price of the option.
- C Call option price.
- P Put option price.
- r Risk-free interest rate. The following cut-offs were used in assigning interest rates to time to maturity: 1-60 days, 1-month rate; 61-136 days, 3-month rate; 137-273 days, 6-month rate; 274-547 days, one-year rate. Interest rates were converted to continuous compounding, using the formula 2 x ln(1+r/2), where r is interest rate based on semiannual compounding.
- t Time to expiration of the options.

Sources:

Ivolatility for daily options data; Bloomberg for daily stock data; Federal Reserve Board for risk-free interest rate.

Exhibit XI
Members of the S&P 400 Software Industry Index
as of the Start and End of the Class Period and December 31, 2013

		Bloomberg	Index Members as of			
No.	Company Name	Ticker	5/7/2013	12/31/2013	4/24/2014	
1	Aci Worldwide Inc	ACIW	X	X	X	
2	Advent Software Inc	ADVS	X	X	X	
3	Ansys Inc	ANSS	X	X	X	
4	Cadence Design Sys Inc	CDNS	X	X	X	
5	Commvault Systems Inc	CVLT	X	X	X	
6	Compuware Corp	CPWR	X	X	X	
7	Concur Technologies Inc	CNQR	X	X	X	
8	Factset Research Systems Inc	FDS	X	X	X	
9	Fair Isaac Corp	FICO	X	X	X	
10	Fortinet Inc	FTNT			X	
11	Informatica Llc	INFA	X	X	X	
12	Mentor Graphics Corp	MENT	X	X	X	
13	Micros Systems Inc	MCRS	X	X	X	
14	Ptc Inc	PTC	X	X	X	
15	Rovi Corp	ROVI	X	X	X	
16	Solarwinds Inc	SWI	X	X	X	
17	Solera Holdings Inc	SLH	X	X	X	
18	Synopsys Inc	SNPS	X	X	X	
19	Tibco Software Inc	TIBX	X	X	X	
Veigl	at of CommVault in the S&P 400 Software Industry Index		5.6%	4.9%	4.6%	

Source:

Bloomberg.

Note:

CommVault's daily return is removed from the S&P 400 Software Industry Index based on its daily index weight, where the daily industry return on date t is equal to: Return of the S4SOFT on date t minus the product of CommVault's weight on date t-1 times CommVault's daily return on date t, all divided by one minus CommVault's weight on date t-1. For this procedure, I use CommVault's daily return calculated based on NASDAQ Global Select closing prices (Bloomberg identifier: CVLT UW).

Exhibit XII News Days

[1]	[2]
Impact	
Date	Headline
1/30/2013	CommVault Announces Third Quarter Fiscal 2013 Financial Results
5/7/2013	CommVault Announces Fourth Quarter and Fiscal 2013 Financial Results
7/30/2013	CommVault Announces First Quarter Fiscal 2014 Financial Results
10/29/2013	CommVault Announces Second Quarter Fiscal 2014 Financial Results
1/29/2014	CommVault Announces Third Quarter Fiscal 2014 Financial Results
4/25/2014	CommVault Announces Fourth Quarter and Fiscal 2014 Financial Results

Notes:

- [1] Impact date for information released after 4 pm based on time-stamps is considered to be the next trading day. Time stamps are based on PR Newswire (U.S.) stories from Bloomberg or Factiva and SEC filings.
- [2] Headline of CommVault press release (www.CommVaultintl.com/newsroom#press_releases) or SEC 8-K filings (www.sec.gov).

Exhibit XIII

Average of Market Model Regression Results for CommVault Common Stock

Dependent variable: R_t (CommVault Daily Return)

Rm_t

	Intercept		(NASDAQ Composite Total	al Return Index)	Excess INDUSTRY _t			
	Coefficient Estimate	t-Statistic	Coefficient Estimate	t-Statistic	Coefficient Estimate	t-Statistic	Root MSE	Adj. R-Squared
Class Period Average	-0.002	-1.17	1.470	7.77	1.104	4.00	0.0164	0.474

Notes:

- [1] INDUSTRY_t is the daily return on the S&P 400 Software Industry Index (after removing CommVault's daily return based on its daily index weight from the industry return). The Excess INDUSTRY_t returns are used to account for industry-wide effects in the market model, after removing the effect of market returns. The formula for removing the effect of market returns from the industry return is {industry return (intercept + beta * market return)}. The intercept (-0.0004) and beta (0.9755) are estimated by regressing daily industry returns on market returns over the period 11/9/2012 to 4/25/2014. 11/9/2012, 120 days prior to 5/6/2013, is the earliest excess industry return used in the CommVault market model. See Appendix G for daily Excess INDUSTRY.
- [2] The Class Period Average includes days from May 7, 2013 to April 25, 2014 (245 trading days, including one day after the end of the Class Period).
- [3] A 120-day rolling regression was run for each of the 245 trading days. For each trading day, a market model regression is estimated over 120 trading days preceding the current day. The model regresses CommVault daily returns on the daily returns of the NASDAQ Composite Total Return Index and the Excess INDUSTRY. The following dummy dates are used: 1/30/2013, 5/7/2013, 7/30/2013, 10/29/2013, 1/29/2014, 4/25/2014. See Section VI.A.2 for a discussion of the selection of the dummy dates. See Appendix G for intercept, coefficient for market return, coefficient for Excess INDUSTRY, return and root MSE from a market model regression estimated for each trading day.

Sources:

Bloomberg and Appendix C. Time stamps are based on PR Newswire (U.S.) stories from Bloomberg or Factiva and SEC filings.

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Exhibit XIV Important News Dates May 7, 2013 - April 25, 2014

[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
CommVault	CommVoult	Moultot		Duadiated	Ahnoumal	Abnormal		
			٠				. 6	
Price	Return	Return	Return	Return	Return	Price Reaction	t-Statistic	p-value
\$77.82								
\$76.33	-1.91%	0.11%	0.39%	0.40%	-2.32%	-\$1.80	-1.36	17.76%
\$77.57								
\$85.04	9.63%	0.49%	0.06%	0.76%	8.87%	\$6.88	5.02	0.00% **
\$82.50								
\$80.51	-2.41%	0.32%	-0.04%	0.21%	-2.62%	-\$2.16	-1.76	8.15%
\$76.10								
\$69.44	-8.75%	-1.13%	-0.13%	-1.93%	-6.82%	-\$5.19	-4.14	0.01% **
¢69.59								
*	20.650/	1 750/	0.200/	2 170/	20 400/	¢10.52	15 40	0.00% **
	\$77.82 \$76.33 \$77.57 \$85.04 \$82.50 \$80.51	CommVault Price CommVault Return \$77.82 \$76.33 \$77.57 \$85.04 \$82.50 \$80.51 \$76.10 \$69.44 \$68.58	CommVault Price CommVault Return Market Return \$77.82 -1.91% 0.11% \$77.57 \$85.04 9.63% 0.49% \$82.50 \$80.51 -2.41% 0.32% \$76.10 \$69.44 -8.75% -1.13% \$68.58	CommVault Price Return Market Return Excess Industry Return \$77.82 Return 0.11% 0.39% \$77.57 \$85.04 9.63% 0.49% 0.06% \$82.50 \$80.51 -2.41% 0.32% -0.04% \$76.10 \$69.44 -8.75% -1.13% -0.13% \$68.58	Excess Industry Predicted Return 877.82 876.33 -1.91% 0.11% 0.39% 0.40% 877.57 885.04 9.63% 0.49% 0.06% 0.76% 882.50 880.51 -2.41% 0.32% -0.04% 0.21% 876.10 869.44 -8.75% -1.13% -0.13% -1.93% 868.58	CommVault Price Return Market Return Industry Return Predicted Return Abnormal Return \$77.82 \$76.33 -1.91% 0.11% 0.39% 0.40% -2.32% \$77.57 \$85.04 9.63% 0.49% 0.06% 0.76% 8.87% \$82.50 \$80.51 -2.41% 0.32% -0.04% 0.21% -2.62% \$76.10 \$69.44 -8.75% -1.13% -0.13% -1.93% -6.82% \$68.58	Excess CommVault Price Return Market Return Industry Return Predicted Return Abnormal Return Abnormal Price Reaction \$77.82 \$76.33 -1.91% 0.11% 0.39% 0.40% -2.32% -\$1.80 \$77.57 \$85.04 9.63% 0.49% 0.06% 0.76% 8.87% \$6.88 \$82.50 \$80.51 -2.41% 0.32% -0.04% 0.21% -2.62% -\$2.16 \$76.10 \$69.44 -8.75% -1.13% -0.13% -1.93% -6.82% -\$5.19 \$68.58	Excess Industry Predicted Abnormal Return Abnormal Price Reaction Abnormal Price Reaction </td

Notes:

- [1] Important news dates in the Class Period. See Exhibit XII.
- [2] to [7] and [9] to [10] See Appendix G. * indicates that abnormal return is statistically significant at the 5% level. ** indicates that abnormal return is statistically significant at the 1% level.
- [8] = [7] x CommVault price on previous trading day.

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Exhibit XV Analysis of the Relationship between News and Abnormal Returns

	Observation on a Date		ACTUAL NUMBER OF DAYS		EXPECTED NUMBER OF DAYS [A]		RATIO OF ACTUAL TO EXPECTED NUMBER OF DAYS	
		No News [B]	News [B]	No News [B]	News [B]	No News [B]	News [B]	
[1]	Number of Days	240	5	240	5	1	1	245
[2]	No Statistically Significant Abnormal Return	227	2	224.33	4.67	1.01	0.43	229
[3]	3] Statistically Significant Abnormal Return		3	15.67	0.33	0.83	9.20	16
[4]	[4] Percent of Statistically Significant Abnormal Return Days of Total Days		60.0%	7%	7%			7%

Notes:

- [A] The analysis is performed for days from May 7, 2013 to April 25, 2014 (245 trading days, including one day after the end of the Class Period). Based on bootstrap results of 100,000 runs using Urn 1 with 5 "News" days and 240 "No News" days; Urn 2 with 16 significant abnormal return days and 229 insignificant abnormal return days.
- [B] News released after 4 pm based on the PR Newswire (U.S.) and SEC Form 8-K time stamps is matched with the next trading day's stock return. See Exhibit XII for effective dates for "News" dates.
- [1] Number of trading days.
- [2] Number of trading days without significant abnormal returns. Source: Appendix G.
- [3] Number of trading days with significant abnormal returns. Source: Appendix G.
- [4] = [3] / [1].

Exhibit XVI Test for Autocorrelation in CommVault Daily Abnormal Returns

Date Range	Coefficient	t-stat	Observations	R-Squared
Class Period 05/07/2013 - 04/24/2014	-0.02	-0.31	244	0.04%

Notes:

Based on regression of daily abnormal returns on prior day's abnormal returns. See Appendix G for daily abnormal returns.

For the purposes of the statistical test of autocorrelation, an extra rolling regression was run for 5/6/2013.